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Guest Editorial

Nursing Education and Service

IN the light of current trends it can be forecast, without great prophetic insight, that we shall see two major developments in the education of the nurse well launched in the next half decade: wide-spread establishment of courses for the education of hospital attendants, practical or vocational nurses, or whatever they are to be called, and the further development and extension of courses for the education of the professional nurse. There are national groups and committees actively considering both of these developments.

The designation "vocational" nurse is often used to differentiate definitely this individual from the "professional" nurse. However, hospitals may call them "hospital attendants", while the public and the nurses themselves may prefer to use the expression "practical" or "vocational" nurse. It is now believed that a minimum period of from nine to twelve months will be required for the preparation of practical nurses, largely on an apprenticeship basis; that they will be registered; that they will have limited functions, such as the care of the less acutely ill; and that they should work under the supervision of the professional nurse, to supplement her service. Their responsibilities, however, will be considerably greater than those of ward helpers or maids. During their preparation, they must be protected against exploitation. Many hospitals may plan to turn out only about as many as they can employ for their routine work.

Considerable experimentation remains to be done on the best methods of training practical nurses, and the range of nursing responsibilities which can be assigned to them. Certain preliminary steps of their education may fall during their senior year of high school, maybe an added year. Progression from the status of *practical* to *professional* nurse should be possible with minimal loss of time for those who wish thus to advance.

It is obvious that when it comes to the care of the sick in their homes it may not be easy to control the activities of the practical nurse by professional supervision, particularly if the practical nurse is well prepared by experience for general duty nursing rather than specialized nursing. Doubtless, different hospitals will prepare them in different ways, depending upon the organization and the size of the differentiated services of the institutions concerned; and registration also will vary with different states.

In the future, many of the duties of the present day professional nurse may be delegated to the practical nurse, leaving for the professional nurse clinical teaching, super-

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visory and nurse headship functions in specialized fields, public health nursing, educational and administrative activities, and, of course, care of the more acutely ill. It may not be generally realized that in the past twenty or twenty-five years the graduate nurse has had turned over to her by the physician a score of new technics and procedures to be carried out on her own initiative when ordered, and, during the same time, has been called upon to assist the physician in another score of new and complicated procedures which modern medicine has developed. If this trend continues apace, it may turn out that the professional nurse of tomorrow will be looked upon as a sort of clinical technician or assistant, calling for still longer preparation. In any event, her education must continue to emphasize care of the patient, and she must never get away from that.

In recent months many of our older nurses, though sorely needed, have hesitated to return to nursing, because "these nurses have recognized a change in the types and variety of procedures which have passed into the hands of the nurse during the past fifteen or twenty years." Student nurses sometimes come under criticism by attending physicians, when it is discovered that they are not skilled in the procedures and technics requested of them. To meet this situation as well as possible, such nurses are often introduced to these procedures and technics too early in their course which is bad educational practice. After their preclinical period, students should be introduced to their responsibilities with patients by degrees, in proportion as they are qualified by experience and background to carry them. In meeting the demands for service in many hospitals, this is not always possible, especially in emergencies like the present war.

The education of the professional nurse of tomorrow is likely to include two programs: (1) a basic course of about four years, with a liberal admixture of general educational subjects as is found in courses for engineers and pharmacists, which will lead to the bachelor's degree and prepare for general staff duty appointments in the various divisions of nursing service, and for general public health work; (2) an advanced program of a year or more, providing for specialization as clinical and other teachers of nursing, supervisory and nurse headships, educational administration, administration of nursing service, and top positions in public health work. This program may lead to advanced degrees equivalent to the master's or doctor's degree. Those who complete it should be expected to have had ample experience before receiving calls to the better positions, for which specialization has prepared.

It is already obvious that, ultimately, there will be far fewer schools for the education of the professional nurse, and far more schools for the preparation of the practical nurse, than exist today. Professional schools will become the responsibility of the larger medical centers.

Physicians, generally speaking, are not interested in education itself; nor is the public in general. Both groups are more concerned about the *product*, rather than the *process*, of education. For a generation now the nurses themselves, like other professional groups, have had to battle for the educational ideals which they have cherished. All education is likely to have serious financial handicaps. This has been particularly true of nurse education, because the time was, when it was believed that the nurse should pay for her education by her service to the sick. No one knows too well even yet whether she is paying too dearly, or too little, for this. However, when this problem and those related to it are viewed in broad perspective, one is compelled to conclude that all forms of education ultimately will be financed in about the same way, from

subsidies provided by endowment, appropriations from tax funds, and by fees. Then, general nursing service will be a direct charge against medical care, paid for, no doubt, in a variety of ways, by subsidies of one kind or another, by patients themselves, and, perhaps preferably, by insurance coverage, quite in the manner physicians' fees are beginning to be covered.

Nurse education today is going through rather abrupt transition, much the same as came to medical education a generation ago, paralleled later by dental education, pharmacy education, and other types. During all such transitions, critics are numerous and vocal. Many of us remember the rather bitter protest against lengthening the medical course and, even more particularly, against lengthening the prerequisite preparation for the study of medicine. As recent as fifteen or twenty years ago, pointed comments on this subject were still appearing in the literature, and even more in medical or lay gatherings, or both. The development of the new trends in nurse education is a typical social movement like those which preceded in kindred fields. They are challenging and bespeak our interest and, mayhap, our cordial aid in assisting them, to the advantage of the profession and of the public. Here, too, is an opportunity for experimental education.

W. T. SANGER, *President,*
Medical College of Virginia.

Governor Clarence W. Meadows of West Virginia (second from left), 1945 Commencement Speaker at the Medical College of Virginia, is pictured above with President Frederick W. Boatwright of the University of Richmond (fourth from left), Honorary Degree Recipient this year, Governor Darden (third from left), and Doctor Sanger.

PNEUMOCOCCAL MENINGITIS

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With the development of new chemotherapeutic agents there has been a slight decline in the morbidity figures in pneumococcic meningitis.[1,2,3] It is the purpose of this communication to show that the death rate can be further reduced if adequate surgical drainage of the primary focus or foci, if accessible, is carried out early in conjunction with these newer therapeutic agents.

The material presented includes all cases of pneumococci meningitis admitted to the medical service at the Medical College of Virginia Hospital and St. Philip Hospital from January 1, 1939, to June 1, 1945. There were a total of 28 cases, 8 white patients and 20 Negro patients. Sufficient clinical, laboratory, and roentgenological examinations were done on each case to make it admissible for study. All the included patients had bacterial confirmation of the diagnosis.

The method of analysis was to divide all the cases into three groups: pneumococcic meningitis in which no sinus foci could be demonstrated, presumably metastatic from blood stream invasion; secondly, those patients in which sinus foci were demonstrated either by roentgen examination or clinically, but who did not have surgical drainage; and lastly, those patients with sinus foci which were drained surgically either during the first or a subsequent admission.

TABLE I.

No.	Statistical Data	Spinal Fluid Cell Count	Type	Blood Stream	Focus of Infection	Treatment	Days of Hospitalization	Result
1.	White female age 66	670	VI	No cult.	Multiple abscesses lungs, thyroid	Sulfadiazine and serum	3 days	Died.
2.	Negro female age 59	7,800	XVII	No cult.	Endocarditis	Sulfapyridine	2 days	Died.
3.	Negro male age 45	3,400	XXV	Positive pneumo type XXV	Endocarditis	Sulfapyridine	31 days	Died.
4.	Negro male age 20	10,000	IV	No cult.	Lung, type IV	Sulfanilamide and serum	1 day	Died.
5.	White male age 78	800	XII	Negative	Not known lung?	Sulfadiazine	4 days	Died.
6.	Negro male age 19	10,000	XII	Negative	Not known	Sulfadiazine and repeated lumbar punctures	31 days	Alive, but died 6 mo. later with convulsions. Cause—?
7.	Negro male age 55	——	III	Negative	Not known	Sulfadiazine	7 days	Died.
8.	Negro male age 46	9,000	IV	Positive type IV	Lung	Sulfapyridine	3 days	Died.

CASE REPORTS: GROUP 1.

There were eight patients in this classification. Six were Negroes and two were white patients. Their ages ranged from 19 to 78 years. Table No. 1 shows

comparative data. The one patient in this group who recovered died six months after discharge in a convulsion, the nature of which was not disclosed. All of them received a sulfonamide drug derivative, usually sulfapyridine or sulfadiazine. In addition pneumococcic serum was used in the treatment of one patient without any apparent benefit. Blood cultures were not obtained on all, but two cases had positive blood cultures with the same type organism found in the spinal fluid. In general the course of the disease was rapidly downhill, but several of this group survived for two or three weeks. Two case histories are presented which we believe are typical.

Case No. 1. B. M., No. 23514, a 45-year old Negro man, was brought to St. Philip Hospital on December 23, 1939.

Three weeks prior to admission he had developed a cold with a cough productive of "white phlegm" and fever. One week before admission he had a definite chill. Anorexia and weight loss were constant during the first three weeks, but he had had no nausea or vomiting. Twenty-four hours before admission he refused food and fluids and soon became irrational and then unconscious. There had been one previous admission to this hospital in 1934 for a stab wound of the chest which had healed satisfactorily.

Physical examination disclosed a poorly developed, undernourished, dehydrated, irrational Negro man. The skin was hot and dry. His temperature was 104, pulse 100, respiration 40, and blood pressure 180/105. The pupils were constricted and did not react to light. His mouth was dirty and dry with a foul odor. The ears were negative. The trachea was in the midline and there was definite, but not marked nuchal rigidity. Chest was symmetrical and expansions equal. There was dullness to percussion over the left lower lobe with diminished breath sounds and a few crackling rales in both lung bases. A friction rub was heard anteriorly over the right chest wall at the level of the fourth rib. The point of maximum impulse was diffuse about 2 cm. outside the mid-clavicular line in the fifth left interspace. The heart sounds were strong and regular and no murmurs were heard. The remainder of the physical examination was not remarkable. One observer thought that a positive Babinski was present on the left foot.

Urine was amber and acid with a specific gravity of 1.030. Other than a two plus albumin and much amorphous material in the sediment it was not noteworthy. The blood picture disclosed a hemoglobin of 52 per cent (Sahli) with a red cell count of 2,400,000. There were 45,300 white blood cells with 92 per cent leucocytes and 8 per cent lymphocytes. A lumbar puncture revealed grossly purulent fluid with a white cell count of 3,400 with 98 per cent polymorphonuclear cells. Organisms were present on direct smear and were cultured as pneumococcus type XXV. Blood culture revealed the same organism. Roentgenogram of the chest was interpreted as showing slight deviation of the heart and mediastinum toward the left with a density throughout the left lung less marked at the costophrenic angle. There was also a small density in the right lower lung.

He was given sulfapyridine by stomach tube and fluids intravenously. Two days later he was rational, afebrile, and considerably improved. Blood sulfapyridine level was 7.5 mgm. per cent, and in the spinal fluid the level was 4.5 mgm. per cent. Marked clinical improvement continued and on the sixth day after admission his spinal fluid was clear. He had been given one blood transfusion.

On the 13th hospital day he began to run a septic febrile course. A chest roentgenogram two days previously had showed some improvement, but the lungs were still not clear. On the 16th day he was unresponsive and had signs of meningitis. A lumbar puncture revealed clear fluid and nothing grew on culture. The sulfapyridine blood level was 19.8 mgm. per cent. On the 20th day he developed gangrene of the left leg following sudden obstruction of the femoral artery. This complication was thought to be due to embolism from an acute endocarditis. Culture from the leg revealed type XXV pneumococcus. He was treated with heparin and then amputation was performed. He failed rapidly in spite of transfusions and other supportive therapy. Death occurred on the 31st hospital day.

This man, after six days of intensive treatment, gave some clinical indications that he might survive. Subsequent events proved this impression an error. The fact that a suppurative endocarditis probably developed or progressed while he was still receiving a bacteriostatic drug in sufficient quantity to maintain an adequate blood level indicates that the initial response was due to a temporary sterilization of the blood stream, and furthermore it shows that as long as an active focus of infection remains (in

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this case the lung) the prognosis is bad because of the possibility of reinfecting the blood stream. The subsequent course with embolism to the left leg supports this point of view. No roentgenological study was made of his sinuses as clinically there was no indication of a suppurative sinusitis.

Case No. 2. P. D., No. 52085, a 46-year old married Negro grocery man, was brought to St. Philip Hospital irrational and unconscious on January 13, 1942.

Approximately three weeks prior to admission this man had developed pneumonia and improved under treatment. He returned to work, but very shortly his condition became worse and he rapidly became unconscious and delirious.

On physical examination the patient was disoriented but overactive. His skin was hot and dehydrated. His temperature was 105, pulse 130, respiration 30, and blood pressure 130/70. The pupils were unequal with the right larger than the left. His tongue was coated and protruded in the midline. The neck was stiff. The chest was symmetrical. There was a draining lymph node in the left axilla. Over the right middle lobe and right lower lobe there were bronchovesicular breath sounds and a few fine and medium moist rales. The heart was not enlarged. The rate was rapid and regular. There were no murmurs. The abdomen was not remarkable except that the edge of the liver was felt at the right costal margin. The extremities were negative. There was a questionable bilateral Babinski. The Brudzinski and Kernig signs were strongly positive.

Lumbar puncture revealed a cloudy fluid under slight increase in pressure. Type IV pneumococci were demonstrated by direct smear and typing reactions. There were 9,000 white cells with 100 per cent polymorphonuclear leucocytes present in the spinal fluid. The urine was negative except for a one plus albumin. The blood picture showed an erythrocyte count of 3,310,000 with 70 per cent hemoglobin, and there were 24,000 white cells with 89 per cent polymorphonuclear ones, 9 per cent lymphocytes, and 2 per cent monocytes. The blood culture was positive for type IV pneumococci. A roentgenogram of the chest was interpreted as showing general enlargement of the thoracic aorta with only slight enlargement of the heart, and with an increase in the bronchovascular markings suggesting pulmonary congestion with no definite pneumonic or tuberculous process.

He was given intravenous sulfadiazine followed by other intravenous fluids and transfusions. Two days later he showed some clinical improvement, but remained stuporous with a stiff neck. The temperature fell to normal. Examination of the sinuses was negative clinically. The temperature remained normal for three days but rose rapidly on the fifth hospital day and he expired. Permission for autopsy was refused.

The history and clinical course in this case are in some respects very similar to the first case reported. There was temporary improvement but death followed very shortly. No clinical signs of an endocarditis were present. The blood stream infection and the meningitis were both due to the same organism. The other cases in this group are more or less similar so far as the clinical course is concerned.

CASE REPORTS: GROUP 2.

This second group includes those cases of pneumococcal meningitis in which there is definite evidence, either clinically or roentgenologically of sinus involvement. In none of these cases was any surgical procedure performed. The age range of the fifteen patients was from 17 to 59 years. Table No. 2 shows the summary data. The mortality was 66 per cent. As before, they were treated with one of the derivatives of the sulfonamide compounds, chiefly sulfapyridine or sulfadiazine, and one received penicillin.

Case No. 3. A. C., a 17-year old Negro girl, was sent to St. Philip Hospital on December 25, 1940, with the diagnosis of meningitis.

She had been ill for about two weeks with an upper respiratory infection and a draining ear following an acute otitis media. Twenty-four hours before admission she had become suddenly acutely ill with rapidly developing delirium and finally became unresponsive.

Physical examination revealed an acutely ill, dehydrated young Negro girl who was unconscious. Her temperature was 104, pulse 140, respiration 25, and blood pressure 150/100. The pupils were equal and reacted to light. The retinal veins were engorged but there was no papilledema. There was perforated left ear drum with purulent drainage. Nuchal rigidity was present. Over the upper right lung there was thought to be impairment to percussion and a few medium moist rales were heard, otherwise the lungs were clear. Examination of the

heart was negative, and the remainder of the physical examination did not disclose any significant findings.

A lumbar puncture was performed and purulent fluid was found under increased pressure. Direct smear showed numerous gram-positive cocci which were cultured as type XIX. The cell count was 10,360. There was a hemoglobin of 70 per cent

TABLE II.

No.	Statistical Data	Spinal Fluid Cell Count	Type	Blood Stream	Focus of Infection	Treatment	Days in Hospital	Result
1.	Negro male age 19	7,200	III	Negative	Rt. mastoid	Sulfapyridine	1 day	Died.
2.	Negro male age 17	220	XV	Negative	Pansinusitis	Sulfanilamide	41 days	Died.
3.	White male age 59	1,500	XXIII	No. cult.	Rt. frontal bone fracture	Sulfapyridine	3 days	Died.
4.	Negro female age 24	2,640	XII	Negative	Left antrum	Sulfapyridine	27 days	Alive.
5.	Negro female age 36	350	III	Type III pneumo	Left otitis media	Sulfanilamide	1 day	Died.†
6.	Negro female age 19	10,350	XIX	Negative	Left otitis media	Sulfapyridine	1 day	Died.
7.	White male age 37	1,190	III	No. cult.	Left otitis media	Sulfapyridine	1 day	Died.
8.	Negro male age 28	22,650	XI	Negative	Frontal sinus following fracture	Sulfapyridine	7 days	Died.
9.	Negro male age 51	8,850	III	Type III pneumo	Mastoiditis	Sulfanilamide	3 days	Died.
10.	Negro male age 17	1,850	I	Negative	Otitis media	Sulfapyridine	31 days	Alive.
11.	Negro male age 17	2,500	XVII	Negative	Rt. frontal sinusitis	Sulfadiazine	14 days	Alive.
12.	White male age 35	272	III	No. cult.	Osteitis of petrous bone	Sulfadiazine	1 day	Died.
13.	Negro female age 16	1,210	XIX	Negative	Frontal sinusitis	Sulfadiazine	32 days	Alive.
14.	Negro male age 42				Frontal sinusitis	Sulfadiazine Pencillin	4 days	Died.
15.	*Negro female age 32	8,000	XVII	Negative		Sulfapyridine	15 days	Alive.
	2nd "		Neg.	Negative	Rt. frontal sinus cloudy	Sulfapyridine	30 days	Alive.
	3rd "	45,000	XXVIII	Negative	Frontals and sphenoids cloudy on X-ray	Sulfapyridine	15 days	Alive.
	4th "	6,400	Neg.	Negative	Pneumonia (?) Frontal sinuses cloudy	Sulfapyridine	15 days	Alive.

*Case of recurrent pneumococcic meningitis which has previously been reported by Craddock and Bowers.

†This patient died shortly after a cisterna puncture had been attempted since fluid could not be obtained on lumbar puncture. At necropsy there were found several puncture wounds in the dura over the cisterna, and it is possible that this may have contributed to her death.

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and a polymorphonuclear leucocytosis of 25,000.

She was treated with intravenous sodium sulfapyridine followed by other supportive therapy, but remained profoundly unconscious and died nine hours after admission.

Autopsy was performed twelve hours after death. The pertinent findings were marked pulmonary congestion and edema, and congestion of the liver. Throughout the pancreas there were many thrombi filling the small vessels. The pituitary gland showed several areas of focal necrosis. Over the surface of the brain there was a diffuse purulent meningitis from which was cultured pneumococcus type XIX. No connection between the left ear and the cranial vault was observed, and the scalp and periosteum appeared normal.

This is a case of rapid extension of the infection to the meninges. The clinical evidence pointed to the left ear as the original source of the infection.

Case No. 4. S. Z., No. A-20851, a 35-year old married engineer, was sent to the Medical College of Virginia Hospital with the diagnosis of meningitis.

The patient had had an upper respiratory infection for three weeks. Three days before admission he returned home from work complaining of headache and pain in his right ear. Nausea and vomiting developed the next day and he became irrational and delirious.

On admission he was unconscious and needed restraint for his delirium. His temperature was 103, pulse 136, respiration 40, and blood pressure 130/80. There was a gash about one inch long over the right eye. The right pupil was smaller than the left and both were irregular and reacted sluggishly to light. The ears were described as normal. The neck was stiff. His chest was clear but there was a Biot type of respiration. The heart was not enlarged and the sounds were of good quality. There was a soft apical systolic murmur. Other than for several abrasions over the body the remainder of the examination was negative.

Laboratory work disclosed a red cell count of 6,000,000 with a hemoglobin of 110 per cent. There were 20,000 white cells with 91 per cent polymorphonuclears, 8 per cent lymphocytes and 1 per cent monocytes. Lumbar puncture revealed a purulent fluid with 272 white cells comprising 83 per cent polymorphonuclear ones and 17 per cent lymphocytes. There were many gram-positive cocci on direct smear which were cultured a pneumococcus type III.

He received 10.0 grams of sodium sulfadiazine intravenously, but expired 16 hours after admission.

Autopsy was performed eight hours after death. The significant findings were confined to the skull. Over the right petrous bone yellow purulent fluid was present. In the right middle ear there was a similar type fluid. The left ear was normal. Over the surface of the brain there was a purulent meningitis particularly in the subarachnoid space and around the frontal and temporal lobes. The arteries appeared normal. Microscopically the meninges were diffusely infiltrated with polymorphonuclear leucocytes and bacteria. Sections of the bone from the petrous ridge showed dense infiltration with phagocytic cells.

In this case the cause of the meningitis was not readily appreciated and no surgery was performed. His hospital course was rapidly downhill. The focus of infection was conclusively shown to be right ear and petrous bone infection.

Of the fifteen cases in this classification five were discharged as cured. In examining the hospital course of this group we found it was prolonged in spite of adequate doses of the bacteriostatic agents. One of these patients had a recurrent meningitis with four hospital admissions, and in three of them the organism responsible was of a different type each time. Recently several cases of recurrent meningitis have been reported in the literature.[4,5,6,7] Furthermore, one of the patients in this group had an infected antrum irrigated on several occasions and this probably contributed to his recovery. Apparently as long as there is a focus of infection it will continue to send out bacteria into the blood stream and thus to the spinal fluid. This probably accounts for the long febrile course in many cases. There is no follow-up study on the five patients in this group who survived.

CASE REPORTS: GROUP 3.

This group consists of those patients with pneumococcic meningitis who during the first or a subsequent hospital admission had surgical drainage of an infected nasal or auditory sinus. There were five such cases with a mortality of 20 per cent. Three were white patients and two were Negro patients. One of the cases to be reported in detail had recurrent pneumococcic meningitis with four hospital admissions before he underwent operation for the involved sinus. Table No. 3 shows the data.

Case No. 5. V. W., No. A-30797, a 32-year old single white woman, was admitted to the neurosurgical service and later transferred to the medical service with the chief complaint of earache, nausea and vomiting.

Two weeks before admission this patient had a head cold and was treated by her family physician with improvement. She returned to work. Five days before admission she complained of right earache and right frontal headache. Two days later she was seen by her family doctor in his office who found a sore throat and advised that she stay in bed. Two days before hospitalization she became restless, irrational and vomited everything taken by mouth. She was sent to a nearby hospital where a lumbar puncture was performed and a diagnosis of meningitis and brain abscess was made. Following this she was sent to this hospital.

On admission the temperature was 103, pulse 122, respiration 22, and blood pressure 120/60. She was a fairly well developed and well nourished young woman who appeared listless, stuporous, and responded only in monosyllables. The pupils were equal and reacted to light. The right fundus showed a large hemorrhage in the right temporal quadrant, and the disc was hazy. There was right external conjugate deviation, and a questionable left facial weakness. No discharge was noted from the ears. The neck was very stiff. Examination of the heart, lungs and abdomen was negative. Further neurological examination revealed no sensory disturbance, and movements of all the extremities were present, but it was thought that she moved her right extremities more than the left. All the tendon reflexes were present, and no pathological reflexes were elicited.

Examination of the blood showed a red cell count of 3,040,000 with a hemoglobin of 58 per cent. There were 13,000 white cells with 92 per cent polymorphonuclears and 8 per cent lymphocytes. The urine, which was obtained after intravenous fluids were begun, showed a specific gravity of 1.024 with 2 plus albumin, 3 plus sugar, 2 plus acetone and diacetic acid. The sediment contained 3-4 red blood cells per high power field. Lumbar puncture performed shortly after admission gave an initial pressure of 400 mm. water, and contained 700 white cells with 90 per cent polymorphonuclear ones and 10 per cent lymphocytes. Direct smear, typing and culture showed gram-positive diplococci identified as pneumococci type I.

The staff otolaryngologist saw this patient the next morning and on examination found a perforated right ear drum with a serosanguineous discharge and also a thick yellow posterior-nasal discharge. There was definite tenderness over the right temple. It was decided to do a right mastoid exploration imme-

TABLE III.

No.	Statistical Data	Spinal Fluid Cell Count	Type	Blood Stream	Focus of Infection	Treatment and Surgery	Days in Hospital	Result
1.	White female age 32	700	I	Negative	Mastoid type I	Sulfadiazine and right radical mastiodectomy	33 days	Alive.
2.	Negro female age 50	2,970	III	Negative	Otitis media	Sulfapyridine and right radical mastoidectomy	3 days	Died.
3.	*Negro male age 39	13,500	XVII	Negative	———	Sulfapyridine and repeated lumbar puncture	42 days	Alive.
	2nd "	19,700	XI	Negative	Pansinusitis	Sulfapyridine	16 days	Alive.
	3rd "	2,250	XXXIII	Negative	Pansinusitis	Sulfapyridine and radical sinusectomy	85 days	Alive.
4.	White female age 41	11,000	IX	Not cult.	Mastoid	Sulfanilamide and left mastoidectomy	36 days	Alive.
5.	White female age 17				Frontal sinus	Penicillin and frontal sinusectomy	21 days	Alive.

*Recurrent pneumococcic meningitis.

diately, and following blood transfusions and intravenous anti-pneumococcic serum, this was done. She had been receiving sulfadiazine since admission. At operation under local and pentothal anesthesia a complete mastoidectomy was performed with exposure of the sigmoid sinus, temporal lobe dura, and bony labyrinth. The operative diagnosis was acute-subacute purulent mastoiditis.

There was a critical post-operative course and treatment with sulfadiazine and anti-pneumococcic serum was continued. The sulfadiazine blood level reached a high value of 25 mgm. per cent on the first post-operative day. Crystals and blood were present in the urine. The dosage was adjusted and the urine cleared without complication. Two days post-operatively she was conscious and answering questions. Several lumbar punctures were performed and on the sixth hospital day the fluid was clear. The cell count was 44 with 41 per cent polymorphonuclears and 3 per cent lymphocytes. Other than for slight edema about the right eye and vertigo in the upright position she continued to improve rapidly. Discharge was on the 28th day after admission.

The patient was last seen in the ear, nose and throat clinic two months after discharge from the hospital. The only complaints at that time were slight diplopia when lying down, and occasional pain over the right eye. She was discharged to return if necessary.

This case represents one in which we believe operation with successful drainage of the infected sinus, even in the face of tremendous odds, was responsible for the eventual recovery. Another very similar patient to this one was a 18-year old girl with purulent frontal sinusitis with meningitis. In spite of a temperature of 104, delirium and unconsciousness, this patient was operated on successfully and left the hospital on the 20th day.

The next case is one of recurrent meningitis. In the 28 patients we have two cases of recurrent meningitis.

Case No. 6. J. P., No. 75196, a 38-year old single Negro man, was brought to St. Philip Hospital by the city ambulance on January 16, 1940.

He was comatose and no history was available.

Physical examination revealed a well developed, poorly nourished Negro man lying quietly in bed. He resisted all attempts at examination. His temperature was 103, pulse 76, respiration 24, and blood pressure 145/100. The pupils were equal and reacted to light. The external ears were negative, but the tympanic membranes could not be seen. There was marked nuchal rigidity. Examination of the lungs, heart and abdomen was negative.

Laboratory work disclosed an erythrocyte count of 5,740,000 with 88 per cent hemoglobin. The white count was 24,800 with 91 per cent polymorphonuclears, 7 per cent lymphocytes, 1 per cent eosinophiles, and 1 per cent monocytes. Lumbar puncture revealed purulent fluid under increased pressure with a white cell count of 13,000 with 97 per cent polys. Direct smear showed occasional gram-positive diplococci which were cultured as pneumococci type XVII.

Following lumbar puncture the patient aroused enough to say that his right ear had been aching since the morning of admission. Examination by the Otolaryngologists was negative. No roentgenograms were taken.

Treatment was undertaken with sulfapyridine and repeated lumbar punctures. Gradually the signs of meningitis disappeared. Convalescence was uneventful except for leucopenia without granulopenia, which was treated with fairly large doses of intramuscular liver extract, and two injections of pentonucleotide. He was discharged as cured on the 27th hospital day.

Second Admission: On January 8, 1941, he was admitted with the history of having gone to work in the morning feeling well. Later in the day he complained of headache and pain in his stomach. Shortly before coming to the emergency room he had had a generalized convulsion.

On examination he was stuporous and acutely ill. Again all attempts at examination were resisted. The ears and sinus seemed normal to clinical examination. The neck was very stiff. There was a questionable Babinski sign on the right foot. During the examination the patient had a convulsion which began with a turning of his head to the right, and tonic spasm of the left side of his body. This gradually spread over to the right and became clonic. Following this he became deeply comatose.

The routine laboratory work was in keeping with an acute infectious disease. Lumbar puncture revealed purulent fluid and type IX pneumococci were demonstrated by direct Neufeld typing.

He was treated with sulfapyridine by hypodermoclysis, and two days later was conscious and re-

sponded to questions. Further history at that time revealed that two weeks before admission he had had a severe cold. There had been no chest pain or hemoptysis. A roentgenogram of the chest only showed slight prominence of the hilar markings. The sinuses and ears were also examined and showed some thickening of the mucous membrane of the frontal sinus especially on the right side. There was thickening of the ethmoids, and in the right antrum there was a moderate density suggesting fluid or pus. Both antra were irrigated and no pus was found. Culture of the irrigating fluid was negative.

His convalescence was uneventful except for extensive herpes of the upper lip. No leucopenia developed as in his first admission. He was discharged on the 17th day after admission.

Third Admission: This patient was readmitted on April 2, 1941, with the following history. He had gone to work feeling well. Around noon he began to complain of violent headache and returned home. Several hours later nausea and vomiting developed, and one hour before admission he had a generalized convulsion.

Physical examination was essentially as before. He resisted all efforts to examine him. The temperature was 104. Examination of the ears, eyes, nose and throat was negative clinically. His neck was stiff. The lungs, heart, and abdomen were normal. Lumbar puncture showed purulent fluid under pressure and type XXXIII pneumococci were demonstrated.

Treatment was begun with sulfapyridine and repeated lumbar punctures. Roentgenological examination of the sinuses revealed complete clouding of the right frontal sinus, the right ethmoids, and an oval density in the lower two-thirds of the right antrum suggesting a polyp or mucocele. The mastoids and lateral sinuses were clear. The spinal fluid remained purulent for six days and cultures were positive for the same organism. He recovered his mental equilibrium very slowly. Repeated roentgenological examination showed extension of the clouding to the left ethmoid and frontal sinuses. Sulfapyridine was discontinued on the 26th day because of red cells and crystals in the urine.

A radical sphenoid, ethmoid, and frontal sinusectomy was carried out on May 8 under avertin anesthesia. Pus was found in the sinuses but the culture was negative. The remainder of the hospitalization was quiet. The day before discharge roentgenograms of the sinuses showed the same polyp in the right antrum, and complete clouding of the left frontal, ethmoid, and antral sinuses. The remainder were clear. The patient was last seen on October 2, 1941, at which time he did not have any complaints.

This case illustrates a patient with recurrent pneumococcic meningitis who came to the hospital each time with essentially the same history. With each infection there was demonstrable a different type pneumococcus. In spite of the fact that on two previous admissions no clinical evidence of sinus infection was elicited, the subsequent course of events makes it seem that he had a chronic focus of infection in the sinuses which periodically seeded organisms into the cerebrospinal fluid. The other case of recurrent meningitis was included in our second group of patients. This patient had four separate hospitalizations without surgery, and the infecting pneumococcus was different on three separate occasions. In the interim between two of the admissions she complained continually of a clear fluid which persistently dripped from the end of her nose. Her subsequent course is not known since she has not been seen since the last discharge.

The one death which occurred in this third group of patients was in a 50-year old woman with diabetes mellitus and chronic suppurative otitis media. She underwent operation on the second hospital day, but succumbed in spite of sulfapyridine and blood transfusions. The diabetes was under control. The organism responsible was a type III pneumococcus. Permission for autopsy was refused.

COMMENT:

The majority of the literature on pneumococcic meningitis, in the last five years consists of single case reports of individual recoveries following the use of sulfonamide and recently penicillin therapy. Several significant reviews have appeared.[8,3,12] In many of these successful cases operation was performed in conjunction with the chemotherapeutic treatment, but little is said about the relative value of the procedure. Gilmore and Sacks were in favor of early surgical drainage of the primary foci of infection, and reported two cases in which recovery followed this method of treatment.[8] They quote from Kolmer[9] and we want to re-emphasize this paragraph from this article.

"Septicemia is not due as much to multiplication of bacteria in the blood as to constant invasion of the organisms proliferating in the primary and secondary

foci of infection. Therefore, the first principle in treatment should be the establishment of the best possible drainage of these foci."

We believe that this principle applies to infection in the cerebrospinal fluid from sinus foci, and feel that our results in this comparatively large group of patients bear out this point. Not all writers are in agreement with this view. Many of them feel that operation should be delayed until some clinical response is shown.[13,14]

Concerning recurrent pneumococcic meningitis, since recently several papers have appeared on this subject[4,5,6,7] we feel that this entity is due to repeated infection from a latent focus. Labby believes that individual lack of immunity to a specific type or different type organism plays the important role. An interesting point in this regard is the rapidity with which the infection overcomes the individual. Both of our cases, one of which has previously been reported, gave clinical histories almost identical with Labby's patient. It is impossible to say that both these patients have been cured permanently. One had surgical drainage of infected sinuses, the other did not. Neither of them has been heard from in the last three years. Roentgenograms of Labby's patient showed "a pansinusitis with right frontal sinusitis and surrounding ostitis". Cultures of the antrum were negative, but it is not stated whether these were taken before the penicillin therapy was begun. Cultures from the antrum of our patient were also negative, but this was after prolonged treatment with sulfapyridine.

SUMMARY:

Twenty-eight cases of proven pneumococcic meningitis were divided into three clinical groups. First those without evidence of focus involvement, the infection being primarily either in the lung or blood stream. Secondly, those with a demonstrable focus in one of the nasal or auditory accessory sinuses, but who did not have surgery. Thirdly, those with a demonstrable focus in the sinuses who underwent operation. The mortality in the first group was 87 per cent, in the second 66 per cent, and in the third 20 per cent.

The authors believe that patients with pneumococcal meningitis who have sinus involvement should have early and thorough drainage.

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SULFONAMIDE PACK IN POSTOPERATIVE OTORHINOLOGIC WOUNDS

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The introduction of the sulfonamide compounds resulted in a welcome revision of previous methods used in the treatment of surgical wounds. Reference to the medical literature will quickly disclose a large number of articles dealing with the use of these compounds applied directly to the wound site.

In certain instances, there may be disadvantages in the application of the sulfonamide compounds in the form of solutions or powder that make their use less effective than desirable. This is particularly true in cavities such as the paranasal sinuses and temporal bone after operative procedures where packing of the cavity may be indicated.

The regional conditions, anatomical and bacterial, present immediately following operations of the paranasal sinuses and mastoid bone differ somewhat from those present in other parts of the body such as the trunk or extremities. Anatomically, in the case of the nasal sinuses, there is the presence of bone in the form of a cavity, which is lined with respiratory epithelium whose continuity has been disturbed. In the postoperative mastoid wound there exists the presence of bony cavity with or without exposed dura and with no epithelium (simple or complete mastoidectomy) or a bony cavity with a partial epithelial surface (tympanomastoidectomy or radical mastoidectomy). With very few exceptions, (fenestration operation for otosclerosis) infection is generally present and constitutes the sole indication for operation.

In the Medical College of Virginia Hospitals, we have had an opportunity to observe the results obtained by the various methods of application of the sulfonamide compounds to postoperative mastoid and paranasal sinus cavities. Inasmuch as one particular method of wound treatment has proved far more satisfactory than any of the others, it is felt that it should be presented for what it may be worth.

PROCEDURE

The material required for application of the method consists of: (1) gauze strips, one inch in width, which, in the rolled state, have been saturated with white vaseline and sterilized in the autoclave, and (2) sulfonamide powder. This may be used singly as sulfanilamide or sulfathiazole or as mixed powder. The mixed form of ⅔ part sulfanilamide and ⅓ part sulfathiazole has been found most satisfactory by us. It is prepared at the time of the operation as follows: The sterile sulfonamide powder of choice is applied to the entire unrolled surface of the vaseline impregnated gauze until each side is uniformly coated with the powder. The gauze is then ready for use. For best results, it is necessary to remove all blood, infected tissue, and debris from the cavity to be treated. When a clean cavity is obtained, it is filled with the sulfo-vas gauze to the degree of pressure desired. It may be left in situ undisturbed for as long as necessary. In sinus cavities, from one to three days, and in mastoid cavities, from two to five days, is the average length of time which has been found satisfactory by us. The packing may be removed in stages or at one time as indicated. The same type of packing may be used for replacement when necessary.

ADVANTAGES

A comparison between the results obtained by methods previously used in the management of otorhinologic surgical wounds and the results obtained by the use of sulfo-vas gauze in thirty patients, equally divided as to cases of surgical sinusitis and surgical mastoiditis, showed that the latter method gave a much more uniform and consistently better result in decreasing complications and drainage, and in shortening the hospitalization period.

The main points in favor of the method rest in the fact that it offers a means whereby the sulfonamide compound is kept in situ in concentration. It can be left in place, or removed as desired. It is of particular value in preventing undesirable clot formation in a cavity. The drug is kept in contact with the cavity wall where its value is most effective. The method offers a means which prevents the drug from being removed from the cavity by continuous bleeding or by a layer of coagulated blood between the cavity and the drug. Thus, in the absence of a diffusely infected blood clot, profuse foul wound discharge and infected granulation tissue, delayed heal-

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ing is kept at a minimum. Instead, the result is a clean cavity, with minimal odor or discharge, and rapid, uncomplicated healing occurs readily.

CONCLUSION

Sulfo-vas-gauze can be used satisfactorily in otorhinologic surgical wound cavities, and has certain advantages over solutions and powders in such wounds. These findings are in agreement with the report of Guerry and Putney[1] who used sulfathiazole gauze paste, prepared with sterile water, in mastoid wounds and noted a marked decrease in the period of wound drainage and hospitalization period. The use of the sulfonamide powder applied directly to vaseline impregnated gauze was first suggested to the writer in 1940 by Dr. H. I. Lillie, and Dr. H. L. Williams, of the Mayo Clinic.

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INDICATIONS FOR OOPHORECTOMY*

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Being so often the site of disease, the ovary naturally often attracts the attention of physicians, and the operation of oophorectomy is a common one. In addition to the frequency of ovarian disease, there are other factors which may play a part, sometimes unjustifiably, in the frequency of this operation. These factors are that the organ is not a vital one, it is easily removed, and its absence is inconspicuous. If the Maker in all His wisdom had seen fit to suspend the ovary externally as He did its counterpart in the male, the operation of oophorectomy, though easier still, would probably be performed less frequently.

It is a cardinal principle in medicine that the treatment of a disease should not be worse than the disease itself. The removal of all ovarian tissue, causing as it does the menopause, brings on a sequence of anatomic, physiologic, and psychic changes almost always undesirable and often very distressing.

Ignorance of ovarian physiology and pathology is often a factor in the improper removal of the ovary. That such ignorance exists is easily understood. Particularly the pathology of the ovary is so complicated, and in many instances so poorly understood, that even the experts are in a sense ignorant. Yet the better the understanding of ovarian pathology, the better will be the treatment of ovarian disease.

*Read by invitation before Staff Meeting of Grace Hospital, Richmond, April 5, 1945.

The ovary has rightly been said to be a hotbed of disease. This is due in large part to the totipotence of its tissues which allows the formation of all kinds of neoplasms, to its constant state of flux which tends toward physiologic disturbances, and to its proximity to the fallopian tube and other organs from which infections so often spread to it.

INFECTIONS

In recent years there has been a laudable trend towards conservatism in the treatment of pelvic infections. This has been accentuated since the advent of sulfonamide therapy; and it will be further advanced by the use of the antibiotics, penicillin being at present the most potent drug available in the fight against the gonococcus.

Infections of the ovaries are usually secondary to infections of the tubes, but may occur by extension from other contiguous organs, or may be metastatic from more remote ones. The infections are usually caused by the gonococcus or other common pyogenic organisms. Conservative therapy with rest, heat, and the drugs noted above will usually result in cure without operation. Even when, and if, in the later stages of the infection operation is indicated, the ovaries can usually be salvaged completely or partially. It should be borne in mind that an ovary may be badly infected and yet capable of recovery if given sufficient time and conservative treatment.

At operation the tube should be carefully separated from the ovary and the latter with its blood supply should be left intact, if possible. However, if the ovarian infection is tuberculous, as it is relatively infrequently, and the nature of the disease recognized, ovarian extirpation is indicated.

NONNEOPLASTIC CYSTS

In discussing the indications for oophorectomy it is essential to distinguish between the retention cysts and the true neoplastic cysts properly known as cystomas. The retention cysts are nonproliferative and are not true neoplasms. The prominent members of this group are the follicle cysts and the corpus luteum cysts. Some degree of cystic change in the ovary is inherently normal. However, because of abnormal hormonal influence, or thickening or adhesions of the surface of the ovary preventing rupture, or for reasons not known, sometimes excessive secretion collects in and enlarges a follicle or a corpus luteum beyond normal limits, and thus cyst formation occurs. This type of cyst seldom reaches large size, and symptoms are more or less infrequent. These cysts often regress spontaneously by absorption with or without rupture. Rarely do they call for operation. When they do because of unusual symptoms, or when they are found at operation for some other condition, the treatment should be conservative. The smaller cysts may be treated by puncture which hastens their absorption. The medium sized or larger ones can be treated by opening them and enucleating their lining and cutting away any redundant wall that remains. Suturing with very fine catgut on a fine needle may be used when indicated. Occasionally an involved portion of the ovary may be resected taking only as much ovarian tissue as is necessary. Rarely, if ever, should the entire ovary be removed.

Care must be exercised not to remove a corpus luteum of pregnancy. The removal of such in the earlier months of pregnancy will often result in abortion.

The large theca-lutein cysts of the ovaries which form in the presence of hydatidiform mole should not be removed. They will regress spontaneously when the primary condition is taken care of.

There is a rare condition in which numerous small cysts of the ovaries with excessive luteinization are associated with signs of masculinization. Wedge resection of the ovaries in this condition has reportedly given good results. We have had several cases so treated. The condition is not clearly understood and the proper treatment still uncertain.

Endometriomas are in a sense retention cysts. They present a special problem and will be discussed later.

Parovarian cysts do not arise in the ovary. They infrequently require operation. Operation consists of removing the cyst itself, leaving the ovary intact.

BENIGN NEOPLASMS

Benign neoplasms whether cystic or solid usually call for the removal of the involved ovary. When the tumor is bilateral, usually both ovaries must be removed; in certain instances, however, resection can be done leaving viable ovarian tissue intact.

Pseudomucinous cystadenomas and papillary serous cystadenomas are fairly common benign cystomas which almost always require removal of the involved ovary or ovaries. Rarely these tumors are carcinomatous; if there is gross evidence of malignancy both ovaries and the other internal genital organs should be removed.

Dermoid cysts are common benign tumors, usually unilateral. They tend to occur in young women. In most cases the tumor can be dissected from the ovary, leaving adequate ovarian tissue, even though at first this does not seem possible. It is especially desirable to do this when the tumors are bilateral.

Fibromas are usually unilateral and in rare instances associated with ascites and with hydrothorax. The fluid should not lead one to make the diagnosis of malignancy. The treatment is oophorectomy. In younger women, if one is reasonably certain that the tumor is not a malignant one, resection of the involved ovary may be the best practice. A Brenner tumor is a rare benign solid tumor indicating oophorectomy. The rare benign adrenal tumor of the ovary produces virilism. Unilateral oophorectomy is indicated.

MALIGNANT NEOPLASMS

These tumors differ in their degree of malignancy. All but those of lowest malignancy require radical pelvic surgery, i.e., bilateral salpingo-oophorectomy and hysterectomy, if they are still in the operable stage. Those requiring this radical surgery are most of the common solid carcinomas and adenocarcinomas, the rare sarcomas, and the rare solid teratomas.

The granulosa cell tumor and allied tumors, and

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the arrhenoblastoma are interesting functioning tumors of low malignancy. The former produces the estrogenic hormone excessively. In the young woman with this tumor, unilateral salpingo-oophorectomy is adequate; in the postmenopausal woman bilateral salpingo-oophorectomy might be indicated. The arrhenoblastoma is a masculinizing tumor. Unilateral salpingo-oophorectomy is the proper treatment. A dysgerminoma is a nonfunctioning tumor of a low grade of malignancy. It probably arises from cells which date back to a phase when the gonads are undifferentiated. The treatment is unilateral salpingo-oophorectomy if the tumor is well encapsulated, especially in a young person. If the tumor is grossly infiltrative, radical removal of the pelvic organs is indicated.

The ovary is sometimes the site of secondary carcinoma. The Krukenberg tumor is an example of this type of metastatic carcinoma. The involvement is usually bilateral. The primary site should be searched for, the gastrointestinal tract, the genital tract, and the breasts being particularly examined. Oophorectomy may rarely be indicated for palliative reasons even though the primary focus remains.

The treatment of primary carcinoma or sarcoma of the body of the uterus or of the fallopian tube requires concomitant removal of the ovaries, whether or not they are grossly involved by the disease, if the condition is regarded as operable at all. Carcinoma of the cervix is usually treated solely by irradiation. However, if operation is performed both ovaries should be removed. I have made exceptions to this latter rule in cases of intraepithelial carcinoma of the cervix in young women.

Miscellaneous Conditions

Endometriosis is a condition in which there is functioning ectopic endometrium. The ovary is one of many sites which may be involved. In any case the condition is dependent on ovarian function and may be relieved by removal of the ovaries. This radical treatment should be avoided in most instances in younger women. Usually an attempt should be made to excise the lesion or lesions if possible or to resect the ovaries if involved. The treatment is often a difficult problem. Usually in young women it is better to do too little than too much, with the hope that the patient will improve following such therapy or can be treated symptomatically. Second operations or irradiation may become necessary.

For many years castration has been recommended by some in the treatment of carcinoma of the breast. This procedure is not yet established on solid ground and must be regarded as still experimental.

Summary and Conclusions

During the child-bearing period and possibly and to a much lesser extent during the remainder of a woman's life the ovary is important to her welfare. Diseases of the ovary are common. The treatment of these diseases should be as conservative as is consistent with the health and happiness of the patient. The relief of symptoms is not necessarily justification for oophorectomy. Often no surgical treatment is indicated. Many times when operation is indicated, puncturing, enucleations, and resections will suffice. Some conditions require simple oophorectomy. But in carcinoma of moderate or high malignancy and in certain other malignant neoplastic diseases, radical surgery must be practiced if the condition is operable at the time the patient is seen.

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AMEBIASIS AND AMEBIC DYSENTERY

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So vast is the problem of malaria in World War II, few of us have turned our attention to amebic dysentery which promises to rank second to malaria in importance in the present war and postwar period. Amebic dysentery is spread widely through the tropical and subtropical lands in which our troops are fighting, and it is not unreasonable to assume that this disease will become more widespread in this country as the number of returning carriers increases.

Amebic dysentery is a protozoan disease caused by the Endameba histolytica, the organism existing in the infected individual as a tissue autolyzing trophozoite or in the form of a cyst. As only the cyst form is thought to be infective to man, the dog and the cat, which harbor and pass only the trophozoite, cannot be blamed for any part in the spread of amebic dysentery. Man alone, for all practical purposes, is responsible for the passage of amebiasis to his fellowman through the fecal discharge of cysts. Such infected feces finds its way to the oral cavity through contaminating water, carrier flies and cockroaches, vegetables fertilized by human feces, and possibly food handlers.

Once in the oral cavity the adult cysts with four nuclei manage to reach the alkalinity of the small intestine where the cyst wall ruptures, freeing the four nuclei. These proceed to form four or eight small trophozoites, which initiate infection in the lower ilium and cecum by burrowing into the crypts, autolyzing tissue cells and dividing to form more colonies. This discrete, pin head size lesion may be the limit of a superficial mucosal lesion but generally the trophozoites work their way into the submucosa, proceeding radially from this base to form a large bubble lesion which is flask shaped. This is the uncomplicated amebic lesion. More diffuse channeling back into the muscularis usually follows with a ragged undermining of tissues.

From this cecal lesion where stasis favors the inroad of the trophozoite, secondary foci may be formed. As the organisms increase they may be carried lower down into the bowel to initiate other ulcerations in the transverse colon, the sigmoid, and the rectum. Through invasion of venules the portal circulation is reached and there may follow invasion of the liver and, less often, the lung, the brain, or the skin. The rarity of lesions of the liver is unusual and it has been suggested that an amebostatic or amebolytic fraction of the liver may be responsible for this relative immunity of that organ.

On the other hand the trophozoite may pass on without reaching the tissues, rounding up its downward passage to form a cyst which is evacuated. There must be hundreds of such cases for each infection.

Before discussing amebic dysentery, it would seem necessary to say a few words about amebiasis. The seemingly relatively benign infection with amebae may well, under more favorable conditions, go into true amebic dysentery. The existence of a carrier stage in which the organisms are present without tissue damage to the host is doubted by most investigators. It is felt that Endameba histolytica is always pathologic.

As with bacterial infections in general the resistence of the host, the virulence of the organisms, the number of organisms and, probably, certain immunologic factors are of importance in determining the severity of amebiasis in any given case. Therefore, one sees amebiasis in an individual who is not cognizant of symptoms, the lesions in such a case being confined to specific areas. So gradual is the display of symptoms such as loss of weight, vague gastrointestinal pains, restlessness, and fatigue, they are unrecognized by the patient.

In a second classification are the symptomatic cases which may be divided into three classes: A. asyndromic with vague gastrointestinal pain, alternating diarrhea and constipation; B. syndromic with cecal lesions giving rise to symptoms simulating chronic appendicitis, peptic ulcer or chronic cholangitis; C. acute and chronic amebic dysentery due to lesions throughout the colon and especially in the rectum.

Undue strain, overwork, and undernutrition ap-

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pear to be capable of throwing the asymptomatic or syndromic types into acute dysentery. It is important to bear this in mind for most of us think only in terms of amebic dysentery. As a matter of fact, amebic dysentery is a comparatively rare entity in the United States, while amebiasis is extremely common. In numerous surveys in this country from Louisiana as far north as Michigan where the surveys have been made by competent individuals using acceptable methods on a sufficient number of specimens, the incidence of amebiasis in clinic populations has ranged from 10 to 16 per cent.

Symptomatically acute amebic dysentery is a "walking dysentery" with slight fever, mild tenesmus, moderate or no leukocytosis, and frequent, copious stools. In contrast, acute bacillary dysentery with which it may be confused is a "lying down dysentery" with high fever, marked tenesmus and leukocytosis, especially later in the disease. In bacillary dysentery stools are scanty and much more numerous. In the last analysis, however, the diagnosis of amebic dysentery is a laboratory one, it being necessary to find the trophozoite in the acute form and the cysts or trophozoites in the chronic.

The most common complication of amebiasis and amebic dysentery is, as might be expected from the pathology, liver abscess. Next in importance is empyema with a bronchial fistula due to rupture of an amebic abscess of the liver through the diaphragm. Less often there is found to be an amebic abscess of the brain, involvement of the skin, or an ameboma of the intestine simulating carcinoma of the colon.

I mention these complications at this point to emphasize that they do occur with amebiasis in the absence of any outright acute amebic dysentery. As a matter of observation amebic cysts are found in the stool in only approximately 30 per cent of the cases of amebic liver abscess, and only 22 per cent of liver abscesses have diarrhea at the time. Fever, tenderness, and pain over the liver area are the only signs of liver abscess in 85 per cent of the cases.

The diagnosis of amebiasis and amebic dysentery demands the close cooperation of the physician and the technician. The physician must know the fundamental pathology of amebiasis in order that he may collect the proper specimen. The technician must be especially trained to recognize both the trophozoite and the cyst and must employ the best technique in making the examination.

With this in mind it seems wise to review the essential pathology a little more in detail. As the trophozoite colonies multiply in the original ulcer in the cecum, many fall into the lumen and are carried on down the bowel where they may attach to form secondary lesions. These new foci may be in the ascending, transverse, or sigmoid colon, or in the rectum, where ulceration results in amebic dysentery. Autopsy statistics from regions where amebiasis is quite prevalent reveal the following frequency of amebic lesions; ileum 5 per cent, cecum 57 per cent, appendix 33 per cent, ascending colon 16 per cent, transverse colon 8 per cent, sigmoid 33 per cent, rectum 40 per cent. In other words, proctoscopic examination under ideal conditions may be expected to reveal only 40 per cent of the cases of amebiasis and largely only those with outright dysentery.

The cycle of the parasite must be understood as well. As the trophozoite passes down the lumen of the intestine, the change in the fecal content from a semi-fluid to a formed stool is associated with a change in the parasite. The trophozoite rounds up, discards undigested food in preparation for encystation, forming a metacyst and then a cyst which is discharged in the formed stool as a nucleated cyst with definite characteristics with iodine stains. This transformation from the trophozoite to the cyst is accomplished probably through the medium of dehydration of feces. Because of this in the examination for Endameba histolytica one finds in a liquid stool only trophozoites, in one which is semi-formed both trophozoite and cysts, and in the formed stool only cysts.

In searching for amebiasis at least three stools should be examined and these at intervals of ten days. It appears that there is a rhythmic discharge of cysts, this rhythm being about ten days. The zinc sulphate flotation concentration technique is considered best for the examination, the fresh films being stained with D'Antony's iodine. Failure to find cysts in formed stools may mean that there is a cecal lesion where obstruction and fermentation are destroying the cysts. With such lesions of the upper bowel purgation frequently must be resorted to if the cysts are to be found. Inasmuch as the use of oil, bismuth, Kaomagma, barium, and magnesia increase the difficulties of diagnosis, saline purgation should be used. Phospho-soda with a Ph of about 7 gives the best result, 4 drams of phospho-soda being taken by the patient upon retiring. The

following morning the purgation specimen is collected and brought in for examination. The same morning about one and a half hours before the patient is to come for proctoscopic examination, an enema of one quart of saline should be taken. This is expelled and repeated, the last portion of the second enema being collected for examination. Once the diagnosis of amebiasis is confirmed treatment should be started. More recently the iodine drugs, especially diodoquin and chiniofon, are being used in preference to emetine. A course of treatment with diodoquin consists of three tablets three times a day for twenty days. There are no toxic reactions. If chiniofon is used, four tablets are given three times a day for seven to ten days. With this drug the patient frequently will develop a severe diarrhea after 48 hours. This can be controlled easily with paregoric. An arsenic preparation, carbarsone, 1 tablet twice daily for ten days is equally effective and widely used by the Army.

Emetine has been found to be only one-third as effective as the above drugs in amebiasis, being inefficient in intestinal disease and in unaspirated liver abscess where blockage of the vessels prevents its reaching the amebae. However, in acute amebic dysentery emetine causes rapid recession of symptoms, one ampule usually being effective in curing the diarrhea. Thereafter, the iodine drugs can be started. The most effective use of emetine is in the relief of acute symptoms and in visceral lesions such as liver abscess and lung involvement. Emetine is the only drug requiring hospitalization, as the toxic manifestations, especially vasomotor insufficiency and toxic myocarditis, are at times severe.

With the world-wide distribution of amebic disease and the greater virulence of the strains in the warmer climates, our armed forces can be expected to suffer a high morbidity from amebic dysentery. From this it must follow that with the return of many of these the number of carriers in this country will be greatly increased. It behooves us as physicians responsible for the diagnosis, treatment, and prevention of the spread of amebic disease, to widen our concept of this disease.

THE NUTRITION CLINIC

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The Nutrition Clinic, only one of its kind in Virginia, was organized early in 1943 to serve patients in the Outpatient Clinic of the Medical College of Virginia Hospital. At that time, all dietary teaching of patients was done on one afternoon a week, by a hospital staff dietitian, who came over from the hospital on her time off. On this afternoon, only diabetics and those wanting to lose weight were seen. From an average of about 24 patients a month under this plan, the Nutrition Clinic has now expanded until it sees about 85 patients a month, and the number is steadily increasing. All types of ambulatory cases are seen, including ulcer, gall-bladder, underweight, and many others.

Patients may be referred from any of the 29 clinics operating in the Outpatient Department. A clinic staff nutritionist (there are two) attends the following clinics: medicine, orthopedics, rheumatic fever, diabetic, admitting and prenatal. At these clinics, the doctor writes into the patient's chart the dietary prescription. For example, in the diabetic clinic, the physician writes the grams of protein, fat, and carbohydrate he wishes the patient to have. The nutritionist then calculates the diet, translating it into terms of amounts of foods which the patient may eat daily.

In every case, an attempt is made to make the diet follow the pattern of the patient's present food habits as closely as possible within the limitations of his diet. An idea of the present dietary habits is gained

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by taking a dietary case history on every patient who comes to the clinic. Thus, if he prefers his hearty meal at mid-day instead of night, his diet is planned to conform to that arrangement, if possible.

Each dietary order is filled individually. No printed diets are given to patients, since the staff at present is able to handle all of the cases personally, adapting the diet to the patient wherever possible.

Patients are given return appointments if it is felt that they may need follow-up teaching, or if they are on a weight-reduction or weight-gaining program. An attempt is made to educate the patient to the effect his food habits have on his condition, and to get him to cooperate.

Sometimes a patient may say he is willing to follow a diet, but unable to do so because he has too little money. Such cases are referred to the social service department to be investigated. Market lists, with the current prices of foods included, and the total cost of the diet are prepared, at the request of social service workers, as an aid in determining the amount of financial assistance needed. In order to make this as accurate as possible, several markets and grocery stores are visited weekly and prices obtained, as well as changes in ration point values, and supplies of least expensive and most nutritious foods are noted.

This same type of service, that is, a market list and meal plan for a week, may also be worked out for families who have enough money to have the right kind of food, but are unwise in purchasing or preparing it and are thus improperly fed.

At the request of various social agency workers, home visits are made to families needing any kind of nutritional help which can best be given in the home. Usually these visits are made with a nurse or social worker.

Student dietitians spend a month in the Nutrition Clinic as part of their year of internship at the hospital. Under supervision, they take part in all the activities of the clinic. Dealing with outpatients involves a shift in viewpoint from that of working with hospital patients. This helps to give them a broader view of the problems encountered in working with people.

Some time is spent in classes on various phases of nutrition for medical, dental, pharmacy and nursing students. This may be a series of lectures or a single discussion of a specific subject.

Educational nutrition exhibits are set up in the lobby of the Outpatient Clinic each month. These are intended for the general public, so each one is planned to tell a story in simple language. Food models or pictures are usually displayed to make the exhibit more effective.

The Nutrition Clinic cooperates on special nutritional problems with the other departments. For example, at present the school of dentistry is working on a program aimed at controlling dental decay. This involves some dietary teaching, and the clinic staff supplies this teaching service.

The staff at the nutrition clinic is glad to give assistance on nutritional problems. Physicians or others interested may address inquiries to the author of this paper.

Medical College of Virginia—Board of Visitors.

According to constitutional provision recently enacted by the General Assembly, members of the boards of visitors of State educational institutions shall hold office for only two or four year terms. This ends the tradition that members of the Board of Visitors of the Medical College of Virginia were elected for life. In the reorganized board just appointed by Governor Darden, there appears only one new name, that of Dr. Joseph D. Collins of Portsmouth, to replace Mr. F. Cleveland Davis who asked to be relieved of this service.

Appointments just made for a period of two years are: Dr. Collins; Dr. W. W. Wilkinson, La Crosse; Dr. J. B. Fisher, Midlothian; Dr. Hunter H. McGuire, Winchester; Dr. Claude B. Bowyer, Stonega; Dr. J. McCaw Tompkins, Richmond; and William H. Schwarzschild, Eppa Hunton, IV, and Lewis G. Larus, all of Richmond.

Those for a four year term are: Dr. John Bell Williams, Richmond; Dr. W. L. Harris, Norfolk; Dr. Stuart McGuire, Richmond; Dr. W. D. Kendig, Victoria; Dr. Douglas VanderHoof, Richmond; J. E. W. Timberman, Alexandria; and Robert T. Barton, Jr., Hugh Leach, and Samuel M. Bemiss, all of Richmond.

THE SERVICE OF THE PHARMACIST

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and
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Pharmaceutical science has advanced rapidly in the last score of years. Numerous discoveries and newer applications of older knowledge have literally rolled in like a series of heavy waves crashing on a rocky shore.

Five years ago we had barely heard of antibiotics. Several sulfonamides have been introduced in this period, others have been put to new uses, dicoumarin has appeared, likewise a useful form of curare, synthetic antispasmodics, a cholecystographic chemical, DDT, and a host of other preparations.

Today the busy physician has little time for reading and sifting the facts offered in the journals and by the detail men who represent the manufacturers.

It is our belief that the modern well-trained pharmacist can and should serve as the impartial link between physician and patient on the one hand, and physician and manufacturer on the other. He has little interest in the promotion of unworthy or useless products for he knows this activity eventually reflects most strongly on his own integrity. He therefore can be relied upon to furnish the most accurate information and assistance of which he is capable. The physician can use his help to determine the most feasible dosage forms, to learn the relative costs of various forms of the same drug, and for many other purposes. His ability to compound extemporaneously "tailor made" remedies, coupled with his familiarity with the many products commercially available, makes of him a valuable ally, but one too infrequently used.

It must be emphasized, however, that we refer to the well-trained, professionally-minded pharmacist. Unfortunately not all fall into this category, and it therefore behooves the conscientious practitioner to determine and suggest suitable pharmacies to the patients. The remainder of the paper is divided into two parts for the reason that the hospital and retail pharmacists serve somewhat differently their respective patrons, both lay and professional.

THE HOSPITAL PHARMACIST

One of the phenomena of medical care in the United States is the relatively slow growth of good pharmacies in hospitals. As early as 1767, one finds some Pennsylvania physicians of the hospital staff petitioning the Board of Managers for better equipment and a small manufacturing laboratory for their apothecary.[1] The large number of hospitals still without any real pharmaceutical care in this modern age, constitutes the phenomenon alluded to.

This section of our paper will be based upon the services rendered at the Medical College of Virginia. We are most familiar with this institution and believe its activities to be fairly representative of what a good hospital pharmacy can furnish in services.

Aside from the obvious prescription filling, the hospital pharmacist can and does render a variety of other forms of assistance to his institution. In our hospital, the staff of four full time pharmacists (and one night pharmacist) are responsible for the following services:

Parenteral Solutions: About twenty types of parenteral solutions are manufactured in our pharmacy. Our annual output of dextrose solutions in various strengths and sizes averages over 30,000 bottles at an estimated cost of 35¢ each. Numerous special fluids are prepared on order in addition to procaine, sulfonamides and other commonly used sterile solutions. Our output is limited chiefly by considerations of space and equipment.

General Pharmaceutical Manufacturing: Our pharmacy produces a large number of special formulas in quantities of five to ten gallons or pounds. In addition, we are able to manufacture a number of standard and official formulas at a considerable saving. Into these two categories fall such items as scalp treatment, anti-asthmatic mixtures, elixirs of vitamin B complex and ferrous sulfate, various ointments, official and otherwise, elixir of terpin hydrate, and many others.

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Research Projects: Our hospital pharmacy makes its staff and equipment available for any serious research problems brought to it by clinical or preclinical divisions. For instance, we cooperate with surgery on burn therapy by preparing several special ointments; with dentistry on its caries-prevention program by the preparation of several special mouth washes. At various times, we have cooperated with the physiology and pharmacology departments.

Physiotherapy: This department looks to the pharmacy for the preparation of its histamine and other iontophoretic solutions. We also stock the disinfectant for the pool.

Clinical Laboratories: General and special stains for all purposes are made in the pharmacy. This service is economical both in money and time for the laboratory.

Nursing Staff: The pharmacy furnishes teaching materials for class work. Through the cooperation of the floor nurses, we keep a close check on narcotics, and a complete control over floor drug stock.

We are about to begin the preparation of adjusted eye solutions for ophthalmology. At present, several unadjusted solutions, and numerous ointments, official and otherwise, are made for this service.

It is felt that the above descriptions, incomplete as they are, can serve to indicate the theme by which we try to operate the hospital pharmacy—"All Types of Services Within Reason." We try to make quickly available the best and most economical forms of drugs without reference to manufacturer. We offer a personal type of service to all departments from the engineering and housekeeping staffs on up to the top of the hospital hierarchy. No request is too trivial to listen to with a serious mien, no task refused that is within reason.

THE RETAIL PHARMACIST

The "Scientist on the Corner" can furnish many of the services referred to in the previous section. For example, he can—when called upon—manufacture small quantities of many special formulas, sometimes even at a saving to the physician and the patient. He can make most laboratory stains, and prepare various solutions of numerous types.

The retail pharmacist sees more sick people than many physicians. He is often able to refer individuals to a physician. Since he realizes the danger inherent in the misuse of drugs, he steers many a person from a dangerous, perhaps fatal blunder of self-medication.

The retail pharmacist usually stocks sick room supplies. Most frequently he carries thermometers, syringes and needles, urinals and bedpans, and various other essential accoutrements. This constitutes a service to both the physician and patient.

In a similar manner, he usually stocks the commoner biological products, both immunizing and therapeutic. In this manner, he relieves the physician of investment in refrigeration and supplies, for he knows the value of proper storage of such items.

Certain legal restrictions are placed on all pharmacists, good and poor. All physicians are aware of the general nature of the narcotic and dangerous drug laws, but few there are who realize how often they ask the pharmacist to violate the narcotic regulations. Unsigned prescriptions, incomplete prescriptions, and improperly ordered office solutions are three of the retail pharmacists' "nightmares".

Any pharmacist can sell many dangerous and potentially dangerous drugs over the counter without often being caught. However, the ethical pharmacist feels that his refusal to sell such items is a service to the best interests of the patient and physician.

CONCLUSION

We have tried to draw, in the foregoing paper, an accurate picture of a good hospital and retail pharmacy's services to the public and to the physician. We are certain that both can do more than represented herein, for we know of cases in which such situations obtain. We also, in a teaching institution, train our students for more services than mentioned here, because we have faith in their ability to perform increasingly complex tasks.

Finally, we would be the first to admit that not all pharmacies measure up to our standards. However, the number which do is increasing at a helpful rate. Meanwhile, perhaps the physician would do well to offer a choice of pharmacists for the patient when he writes a prescription, just as he would when he refers them to a surgeon or other specialist. Such a course would be of immense value to all groups concerned. It should not be difficult for a physician to acquaint himself with the ethics and policies which govern any pharmacy.

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OCULOGLANDULAR TULAREMIA, REPORT OF A CASE

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Oculoglandular tularemia, first described by Vail[1] in 1914 and since recognized in many parts of the United States as well as foreign countries, is still sufficiently rare to warrant the recording of individual cases. The present case is also of interest because of the problem in differential diagnosis posed. No attempt has been made to review the literature as excellent discussions are to be found in the articles by Vail Sr.,[2] Vail Jr.,[3] and Francis,[4] the latter of whom has given a comprehensive survey of the world picture of the disease.

CASE REPORT:

V. C., a seven year old apathetic colored female, was seen in the eye clinic of the Medical College of Virginia on November 2, 1944, with the complaint of a "swollen and running left eye" of one week's duration. Two weeks before, the child had been vaccinated in the deltoid region of the left arm and a "take" had resulted. No history of contact with rabbits could be elicited at that time but at a later date the child admitted having caught and played with a "sick" rabbit at school, two weeks before.

When first seen the lids of the patient's left eye were matted together by thick yellowish exudate which had poured out to encrust a portion of the left cheek as well. Retraction of the lower lid revealed a large ulcer crater involving about one-fourth of the tarsal surface and covered with grayish exudate. The region over the lacrimal sac was swollen and pus exuded from the puncta on pressure. The bulbar conjunctiva was considerably injected and moderate chemosis was present. The left preauricular node was tremendously enlarged and tender to palpation. A healing vaccinal lesion was noted in the deltoid region. A tentative diagnosis of Parinaud's oculoglandular syndrome of vaccinal etiology was made and the patient admitted to the hospital for treatment. Smears, cultures and scrapings were taken and animal inoculations carried out.

After admission to the Dooley Hospital, the only positive finding other than those of an ophthalmological nature, was a macular rash over the legs and thighs which disappeared on pressure. Although the patient did not appear acutely ill, her temperature ranged from 101 to 105. Urinalysis was negative. Total white count was 18,100 with 61 per cent polymorphonuclears and 33 per cent lymphocytes. The red blood cells numbered 4,000,000 and the hemoglobin was 62 per cent. Wassermann and Kahn were negative.

Penicillin ointment containing 1,000 Oxford units to the gm. was placed in the left conjunctival sac lid and the eye kept clean with boric solution. Sulfadiazine with sodium bicarbonate was given by mouth. When, on the fourth day, the patient continued to run a febrile course not explained by the eye pathology alone, routine agglutinations were taken and reported positive in 1:640 dilution for tularemia. By this time the lower lid of the affected eye showed numerous ulcer craters and granulations.

Photograph of patient.

A frankly purulent dacryocystitis with a draining fistula had also developed. Cultures were positive only for staphylococcus aureus but the rabbit which had received a subcutaneous injection of material from the eye lesion died. Autopsy failed to reveal any lesions characteristic of tularemia.

On November 15, the sulfa drug was discontinued and 15 cc. of antitularemic serum was administered intravenously. This was repeated on November 16 and the next day the patient's temperature dropped dramatically to 99.2. Agglutinations carried out at this time by the State Health Department were reported positive for B tularense in 1:1280 dilution. A rise to 101 was noted on succeeding days but by November 25, the child was afebrile.

By December 6, 1944, the conjunctival lesions had healed and the dacryocystitis had disappeared. On December 20, the patient was discharged as well. When seen in the eye clinic one month later, both eyes were normal.

DISCUSSION

In all cases of Parinaud's oculoglandular syndrome (granulomatous conjunctivitis with regional adenopathy) oculoglandular tularemia should be suspected. While other causes of Parinaud's conjunctivitis such as tuberculosis, lues, streptothricosis, leptotricosis, sporotrichosis, rhinosporidiosis and vaccinia may give rise to an ocular lesion closely resembling that of tularemia, these are but rarely associated with a severe systemic reaction. The differential diagnosis is easily made by animal inoculation and agglutination.

In this case it is highly unlikely that the antitularemic serum materially modified the course of the disease. At the time the serum was administered the disease had obviously reached its peak and had begun to abate. As would be expected, sulfadiazine was also ineffectual in controlling the disease. While the penicillin ointment was of no value in combating the lesions caused by B. tularense, some improvement was noted in the appearance of the local lesions due, presumably, to the control of secondary invaders.

SUMMARY

A case of oculoglandular tularemia is reported. Oculoglandular tularemia should be suspected in all cases of granulomatous conjunctivitis accompanied by systemic reaction.

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The Alumni Association of the Medical College of Virginia, . .

At its annual meeting in Richmond on June 16th, elected the following officers for the coming year: President, Dr. Waverly R. Payne, Newport News; vice-presidents, Dr. R. J. Wilkinson, Huntington, W. Va.; Dr. R. R. Rooke, Richmond; Dr. J. J. Stigall, Jr., Richmond; and Mrs. Anne F. Mahoney, R.N., Richmond; secretary, Dr. W. Henry Street, Richmond; treasurer, Dr. Harvey B. Haag, Richmond. Members of the Board of Trustees, elected for a term of three years each, are: Drs. Harry Lee Claud, Washington, D. C., C. C. Coleman and James H. Smith, Richmond; and George W. Schenck, Norfolk.

Dr. Roshier W. Miller of Richmond, presented a resolution recommending that the by-laws of the Association be amended to permit the election at the next annual meeting of a president-elect, and this was unanimously adopted.

THE CHAPLAINCY AT THE MEDICAL COLLEGE OF VIRGINIA

THE REVEREND GEORGE OSSMAN, CHAPLAIN,
Richmond.

A woman, prepared for operation, was being rolled through the hall when she saw the chaplain. She knew him for he had visited her many times during a long illness and a series of operations. She was going back to the operating room for an emergency. He recognized her and immediately went to her side. As he took her hand, she gripped it hard and reached for the cross, dangling on a chain around his neck. No word was said. He bowed his head in silent prayer for a moment or two. The patient with a lingering smile of thanks was moved on down the hall.

The presence of the hospital chaplain at the bedside of a patient in the Medical College of Virginia hospitals is now taken as much for granted as that of the doctor or nurse. He is a regular member of the staff. At the Massachusetts General Hospital in Boston, in the Institute of Pastoral Care, he has been trained in an understanding of the patients' needs and the doctors' desires. He is thoroughly familiar with hospital routine, even trained to do the work of an orderly in an emergency. His work at the Medical College is supported by the Interdenominational Religious Work Foundation of Virginia.

The hospital chaplain is also rector of the church next door. The Monumental Episcopal Church and the Medical College of Virginia have occupied the same block for over a hundred years. Funds have been supplied to make the church a connecting unit of the hospital, thus enabling wheel-chair patients to attend services, organ recitals, or to go in for a time of quiet and prayer. The church is built in the shape of an octagon. Inside the old edifice, the murals on the dome and the stained glass windows is a foreground for the sanctuary where a painting of the resurrection angel stands by the empty tomb. To the left, off on a distant hill, mutely stand the three crosses.

The chaplain's day begins at nine when he checks in to take care of his desk work. He must first get the new list of admittances of the previous day and night in order to decide whom to see. Next, he must check his mail and take care of communications with families of out-of-town patients and patients who have left the hospital but want his advice. He then looks over his records. He keeps a record of every patient he sees in order to follow through each day with a constructive visit.

He looks over the work left by his assistants, the Reverend Ernest F. Hall, a retired Methodist minister, who requested training and now gives untiringly of his time, and the Reverend William W. Mankin, a Negro Baptist minister, who is studying pastoral care and giving his services to St. Philip Hospital, a unit of the College.

Phone calls come in from supervisors or nurses for him to see special patients. Students or hospital employees find him helpful and come to him freely for all sorts of advice.

At ten-thirty, the chaplain finally gets started on his rounds. First he sees the cases he considers most important and then routinely he goes from floor to floor. He can not see all; he tries to see those who he knows need him and always to check on those from out of town.

This morning he must see a young boy from the country who is being treated for brain tumor. He finds him very weak and nauseated. The chaplain knows how rushed the nurses are, so he holds the child's head, wipes his mouth, and puts in a call for a nurse. The boy sinks back on the pillow exhausted, opens his eyes and looks up, then with a wan smile whispers, "Oh, its you—thanks."

In the next room he talks at length with a woman who is dreadfully worried about her family at home and the expense of the hospital. He helps her think her problems through. When he leaves, she is not so wrought up, and he promises to see her again soon.

On another floor, a nurse comes to him to say that a patient he has seen before is dying. He goes right in and stays as long as the woman is conscious. Members of her family have been sent for, but they have a long way to come.

On the wards he must stay long enough to speak to everyone. Frequently he uncovers difficulties which when known can be alleviated by the medical social workers with whom he is in close touch.

He never feels that he has seen as many patients

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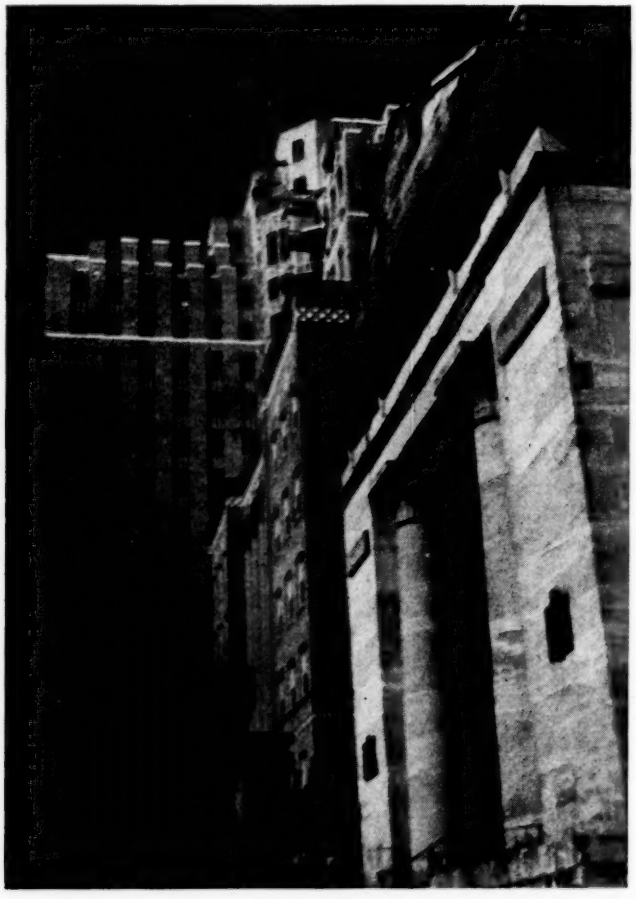
as he would like, but his time is limited.

Whenever a patient is desirous of seeing a priest or rabbi of his own denomination the chaplain has an arrangement with clergymen in the city who will come when called. The chaplain tries to see all patients who want him regardless of race or creed.

On Wednesday afternoons a class of young men from the Presbyterian Seminary and a class of young women from The Assembly's Training School meet him for instruction in pastoral counseling. After lecturing, he sends them to see special patients and report to him. Every interview must be written out in full and discussed for only thus can a visit be controlled sufficiently to be sure it is worth while and not just a casual social call.

As soon as he can get away from the hospital, he must be with his own congregation and take charge of the parish affairs of the church.

To some of us it is particularly striking to see in an airplane view of "Hospital Square" three buildings—the main hospital, the clinic, and the church—each one constructed in the shape of a cross, the symbol which has led so many of the pioneers in mental and physical healing.



The Chaplain's Church is in the foreground. Close to it is the Medical College of Virginia Hospital.

THE PUBLIC HEALTH NURSE AND THE PRIVATE PHYSICIAN

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One of the more recent developments at the Medical College of Virginia is the public health nursing division of the school of nursing. The general objective of this division is to prepare graduate nurses for positions with public health agencies. If broken down into its last analysis it is to prepare nurses to be of service to individuals and families in the community and to their private physicians, in order that maximum health might be obtained by all. Such a program involves both nursing care and health education. This latter interpretation of the functions of the public health nurse is not always realized, nor is it generally known that the public health nurse is available for service for all in a community regardless of economic or social status. Just how this program of study prepares nurses to serve the general practitioner and his patients might better be understood if a few typical visits by the nurse were related.

Under the present war-time conditions, where there is a waiting list for hospital beds and a shortage of nurses, it is not unusual for patients to return home from the hospital well before the convalescent period. This is especially true with maternity patients, and fortunate is that community which has a health agency employing public health nurses who give bedside care. Such agencies are usually known as visiting nurse services, since their nurses remain in the home only long enough to give the major nursing care needed and to teach someone to care for the patient in their absence. These nurses average six to eight home visits a day.

A not unusual situation might be a five day postpartum mother who has returned home from the hospital. She is from the group of patients who would ordinarily have a private nurse, but none being available because of the heavy demands of the military, she is referred to the local visiting nurse service for a public health nurse to give her and the newborn infant a daily bath. For this service she will pay a specified fee. Before visiting the family, the nurse gets in touch with the private physician to learn of the condition of the patient and to get his personal orders for care. She then goes to the home and carries them out. While there, through general conversation she finds what the family already knows, and according to needs she teaches the attendant and the mother how to bathe the infant and how to give the mother and baby care in between her visits. She discusses the diet of the mother, and especially diet in relation to breast feeding if the baby is on the breast. If the baby is on a formula she emphasizes the importance of keeping him constantly under the physician's supervision, both now and in the future, rather than following advice given in books or by neighbors, since each baby is different and needs individual care.

While a given patient affords the nurse an entrée into the home, once she has established a good relationship she becomes interested in the health of all and the effect of the health of each on the family as a whole. So in the above situation, during the course of her visits the nurse would inquire if the preschool children, if any, had been immunized against any of the childhood diseases. If not, this gives her the opportunity to explain that medical science has discovered various agents that will safely protect individuals against certain of the communicable diseases. She then encourages the mother, when she is strong enough, to discuss this with her physician, and to follow his advice in this respect regarding the infant and other children in the family, should they not already be protected.

A nurse who develops good rapport in a home and gives satisfactory nursing care invariably is referred to other patients. These may not be maternity cases, but they might be diabetics, advanced cancer cases, or any patient in need of nursing care.[1] They may or may not be able to pay the usual fee, but in either case the care will be the same, since the budget of such agencies is supplemented by the community fund or some other philanthropic source.

Regardless of the physical condition or by whom the patient is reported, the nurse first contacts the family physician to get his diagnosis and his special orders for the care which he desires the individual to have.

With the diabetic the nurse has an excellent op-

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portunity for teaching. Not only does she teach the patient the care of the insulin, if ordered, and demonstrates how to give it, and teaches how to plan the day's diet from the foods allowed, and how to weigh and measure the food, but she also teaches the importance of personal hygiene, the avoidance of infection, and the need for constant supervision by the physician.

If the diagnosis is advanced carcinoma, the nurse will have an opportunity to practice her art of nursing, for she realizes that good care can do much to enhance the effects of the medication given to relieve the physical discomfort. If there is an open wound, the nurse will demonstrate the care of the patient and how to sterilize the necessary dressings in the home.

Situations of this kind give the nurse an excellent opportunity to teach the family and others the urgency of reporting early to their physician any unusual discharge or growth, the difference between surgery and the biopsy, and the importance of returning to the doctor as directed. She emphasizes the importance of returning until a definite diagnosis is made, the condition treated, and the periodic follow-up examinations assure the physician the condition will not return.

The above are but a few of the ways in which the public health nurse works in close cooperation with the general practitioner for the good of his practice.[2,3,4] But this relationship of patient, physician and nurse is not limited to the public health nurse carrying a bedside program; every nurse, whether a member of a staff connected with a department of health, a department of education or with an industry, appreciates that the closer she works with the family physician the more successful she will be in her profession.

The relationship of the department of health nurse and the family physician[4] is generally not so clear cut as it is with the visiting nurse. In fact, there are some who erroneously think that the nurse with the official agency works independently of the physician. This is due to several reasons, one being the fact that most public health nurses in official agencies are administratively under the guidance of the health officer, who is himself a physician. This is true as far as the administration of the program goes, but the fact is that many official agencies do insist that their nurses contact the family physician before making any visit, even though it be just to give advice to a young mother regarding the care of the infant.

Another cause for misinterpretation is that many indigent patients who do not have a private physician are registered with certain clinics, such as the child welfare conference or the syphilology clinic where they are under the supervision of the clinician, who is also a physician.

A third misleading factor is the standing orders which most agencies have.[4] This is a list of orders for emergency care for patients suffering from specified conditions; these are drawn up by a group of physicians and approved by the local medical association. They might also include general advice regarding the hygiene of pregnancy or the nutrition of the infant and preschool child. But these are to be used only where there is no family physician, for it is recognized that the needs of no two patients are exactly alike and that often physicians differ in their preferences regarding care.

The public health nurse not only does not work independently of the physician, but many times she is in a position to increase his practice. The care and instruction which she gives is not limited to the particular patient who takes her into the home, for she eventually becomes interested in the health of all the other members of the family. Although the nurse never makes a diagnosis, because of her knowledge of health and disease she recognizes symptoms which might lead to illness. When this occurs she urges the individual to consult his physician, and discusses with him the condition which should be brought to the attention of the physician in order to aid him to make a diagnosis and advise treatment.

While the nurse with the department of health, as with the private agency, is interested in getting individuals under the supervision of the physician when physical conditions suggest such care, she is equally anxious to assist him with his patients. Even though her program does not include continuous bedside care, she uses the demonstration as a teaching method. Any physician may request the nurse to visit the home of a patient to demonstrate to the family isolation technique in order to erect a barrier around the patient with a communicable disease and prevent the specific organism from spreading to the attendant, the family and the community. The entrée into the home gives her a chance to discuss with the family the importance of health

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supervision following recovery, and if indicated the value of immunization for those diseases for which there is proved immunity. In such conferences the nurse has in mind the prevention of disease, and the emphasis is on positive health rather than on morbid conditions. Some physicians fear the annual physical examination will make hypochondriacs of their patients, whereas if approached from the positive angle it is one of the most efficient tools which we have for maintaining health at a high level.

The nurse can also help the physician with his syphilis patients, both with case holding and case finding. If requested, the public health nurse will visit these individuals and explain to them the nature of the disease, the danger of contagion and congenital syphilis, and the complications due to insufficient treatment. Many of these patients when approached in an objective manner by a nurse, who can inspire confidence by her sincerity and her experience in interviewing, will either be responsible for having their contacts examined or will request the nurse to talk with them. Naturally the nurse will assure the patient that his confidence will in no way be betrayed.

It is not difficult to understand the value of the school nurse and her relationship with the general practitioner, since the main objective of the school health program is the conservation and the promotion of the health of every school child. This is done by developing within the child a knowledge of normal health, and favorable health attitudes and practice.

One means to this end is the health inventory which many agree is more satisfactory when done by the family physician who is as much interested in preventing defects as in finding and correcting them.[5] Whether this inventory is made by the family doctor or the school physician the nurse interprets the findings and recommendations to the parents and the child and aids them in making plans to have these conditions corrected.

Of far more value, however, than the correction of defects, as important as that is, is the acquiring of health knowledge and the development of health attitudes. With this will come an appreciation of the family physician not only as one to be sought when deviations from normal appear, but one who is to be visited periodically for the health examination in order to prevent illness. In other words, the young child in the school gradually develops throughout the years an appreciation of the preventive aspect of medical care, and the nurse has a vital part in this program.

When the school, the nurse and the family physician combine their efforts to develop within the child this desire for maximum health, including the correction of defects, we will not find 50 per cent of our youths ineligible for military service as happened with the first 2,000,000 young men examined for selective service during the early years of the present war.

The industrial nurse, like other public health nurses, is interested in the prevention of illness; how else can she keep the employee on the job. It is true most industries do employ their own physicians, but their chief interest is in the industrial life of the employee which covers only about one-third of his time. During the other two-thirds of the day his health is greatly affected by environmental influences, family relations, personal hygiene, nutrition, and physical ailments not related to the industrial process. Any or all of these might lead to conditions needing medical supervision. The alert nurse sees behind the frequent headache, the disordered stomach and similar ailments the possibility of much more than the complaint itself and begins to question the individual. Probably improvement in personal hygiene might be all that is needed, but on the other hand medical attention is often indicated and the individual is referred to his personal physician for this purpose. Furthermore, it is not unusual for an employee to consult the nurse about the health problems of members of his family and a careful analysis of the situation frequently leads her to urge the individual to seek medical advice.

Today we are realizing more and more that there are not two types of medical care, namely preventive and curative medicine, but that each is an aspect of the same and cannot be separated. Because of this, experiments are in operation in several of the larger centers where the health program of the official and non-official agencies are being combined under the department of health and bedside nursing is being included as one of the functions of the staff nurse of that agency.[6]

According to Dr. Joseph W. Mountain,[7] Assistant Surgeon General of the U. S. Public Health Service, at present the health of only about two-thirds of the local communities is protected by organized departments of health, and plans are now being made so

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that after hostilities cease public health will be reorganized on a national scale in order to protect the health of all the people in the United States. This will mean an increase of from 50 per cent to 75 per cent over the 19,821 active public health nurses now employed in this country if we are to meet the minimum requirement of one public health nurse to every 2,000 population. It is to assist with the preparation of these needed nurses for positions with the visiting nurse association, the department of health, the school and industry, or for the department of health, which includes both school and bedside nursing with other services of its program, that the Medical College of Virginia has established its program of study in public health nursing. This program of study provides all the courses required in the major for public health nursing and leads to the B.S. degree in Nursing Education.[8] The above functions of the nurse reflect the philosophy of the program which is integrated throughout the various courses, and every effort is made to strengthen the relationship of the nurse, patient, family and the general practitioner.

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Penicillin Therapy of Venereal Disease.

The following statement to the VIRGINIA MEDICAL MONTHLY from Major Kenneth N. Byrne, M.C., Class of '37, M. C. V., now located at Camp Pickett, is of interest:

My new duties at the Convalescent Hospital in Camp Pickett find me as head of the section of Physical Medicine.

Were it not for the red tape of having all medical papers approved one could take more interest in relating medical experiences. As it is few of us attempt to publish anything.

One point which I've seen which may be of great importance in penicillin therapy of venereal disease is that in treating successfully a case of gonorrhea the dosage of penicillin served to mask and suppress a syphilitic exposure without curing it, so that a latent case of syphilis may occur without any apparent primary lesion. I have known of two cases of such latent syphilis picked up only after the development of a secondary rash. With penicillin being available for general civilian use, a warning as to this serious complication should be publicized.

THEORY AND PRACTICE IN THE PREPARATION OF NURSES

ARCHER WILLIS HURD, PH.D.,
Director, Bureau of Educational Research and Service,
Medical College of Virginia,
Richmond.

In discussions of the Steering Committee of the Curriculum Research Project, being carried on in the schools of nursing, associated with the Medical College of Virginia, attention has focused on the general curriculum set-up, involving the relative importance of theory and practice in the training program. The acceleration due to the war has intensified the issue. If theory can be correlated with practice all the way along the educational route, it is obvious that time may be saved and acceleration continued. This means, to be sure, that no valuable educational outcomes shall be sacrificed in the process.

Preparation for intelligent nursing involves knowledge and information, skills, trait development, personality enrichment, and an encouraged interest in the profession. If these several phases of growth and development may be cared for simultaneously, so much the better. The concept, "We learn to do by doing," has long been advanced by educators as a more efficient method of learning. It has been stressed particularly in connection with purely theoretical courses, not closely correlated with everyday life and behavior. Laboratory courses in the arts and sciences have been designed especially to take care of desirable correlation, which seems to be missing too often in non-laboratory courses.

In the preparation of teachers, the need for a closer integration of theory and practice has long been evident, and has not yet been satisfactorily solved. In nursing education, the service requirements of students have, generally, more than taken care of needed practice, to make the theory courses more meaningful. The question now becomes, "Has practice in nursing education gone too far, and usurped part of the time which should be given to theory?" "Can the nurse collect sufficient knowledge and information—important outcomes of theory courses—while engaged in activities associated with practice?"

In order to assist the committee in thinking through the problems of theory and practice, a questionnaire was prepared and sent out to a sampling of nursing schools, 176 in number, situated in different sections of the country. The following discussion is based on returns from 90 schools. The summary of replies and the questionnaire items are omitted to save space.

DISCUSSION

Fifty-two replies indicated a consensus of opinion against continued acceleration of training after the war. The twenty-seven who thought acceleration had proved its value are in the minority. It would be interesting to know why they thought this way. Perhaps they belong to a group believing primarily in the virtue of "learning by doing" and that nurses need experience rather than theory courses. Perhaps, also, they believe that people waste much time which might be utilized in speeding up the process of training.

The fact, that 70 did not favor substituting practice while learning for most theory courses, indicates, however, that the majority are in favor of emphasizing theory at least as strongly as it has been emphasized in the past. Only 10 expressed themselves in favor of increasing practice while learning, at the expense of theory courses.

However, only 12 favored more theory, while 71 opposed it.

An internship period, after theory courses are completed, was favored by forty-two schools, with thirty-two opposed. This indicates a desire that less attention be given to service work by students in preparation, which is substantiated by the replies of 45, indicating that student nurses have too varied a program at one time. Forty-two indicate their partiality for concentration on theory, alternated with concentration on practice, in order to relieve the strain and inefficiency involved when they are not differentiated.

Fifty-three favored fewer and more comprehensive courses. Even more favored practice, during training, only for its educative values. An almost unanimous opinion expressed the belief that knowledge and information are as important as skill and art.

There was almost unanimous agreement that nursing education should have as its aim the development of a functional personality, rather than the mere teaching of fixed skills and techniques. This

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is important in planning an educational program. It is not so difficult to teach fixed skills and techniques. It is quite a different thing to develop a functional personality prepared to tackle and solve the many different problems which confront her.

The concept of study guides and work books for nurses was accepted by about two-thirds of the group. This is especially important if the nurses are expected to do more and better studying; and instructors haven't sufficient time to consult with each student separately. One respondent referred to the study guide and work book as a childish concept. But it is fairly obvious to experienced instructors that students in college do not always know how to study. This is particularly true when the instructor is vague as to assignments and makes no attempt to direct study. Professional educators are fairly well agreed that instructing, as a function, is primarily one of motivating and directing study by the students.

A majority of respondents agreed that nursing education was no longer to be considered as supervised apprenticeship, although 33 still thought of it favorably as such. Nurses have now reached the stage where they regard an apprenticeship preparation insufficient to produce functioning personalities on a professional level. If the nurse is to be given charge of ill patients and called upon to solve many of the physical, psychological, and social problems which arise, she should have a superior preparation.

Sixty-six of 88 believed that service requirements should not interfere with theoretical education. This is important and implies that the staff of regular nurses in the training hospital should be large enough to care for all patients in the regular course of events. It does not preclude the possibility of having much useful work done by students in training—only that education should be primary, and service work undertaken for its educative values.

Seventy-six thought that achievement should be evaluated without being tied in too intimately with time spent. It seems obvious that some nurses are much more efficient than others, although their time period for preparation might have been much shorter. The implications here are that provisions should be made, in the preparation of nurses, for individual differences in aptitude and native ability. Perhaps the wisest sort of provision would be one of special enrichment, or special opportunity, for the most able.

Seventy-two stressed the need for more study by student nurses. This is a problem in every type of educational institution. In the opinions of instructors, students do not read widely enough. Nor do they study the textbooks with enough concentration to acquire desirable amounts of information to stimulate thought.

Seventy agreed that instructors should be free for their primary function of instruction—that service duties should not hinder them in the instructional function. This implies that a sufficiently large service staff should be available to care for all patients in an emergency; but does not preclude valuable service work by instructors.

Eighty-three believed that instruction is best tied up with service. Under the circumstances, it is to be inferred that there is almost unanimous opinion that theory without practice and practice without real service, are undesirable. Instruction is fundamental; practice is a necessary part of instruction; and practice should be real—not make-believe.

Forty-five were of the opinion that present practice unduly emphasizes service, but 38 would not admit it. The controversy is resolved by having a sufficiently large personnel of regular service nurses to make unnecessary too great dependence upon students, or instructors, for the performance of purely service duties.

In summary, there is not a demand for more theory; nor for more practice; nor for a longer period of preparation; nor for more formal instruction; nor for more speeding-up of the preparation. There is some demand for less service requirements; and distinct demands for more leisure time; for better lesson assignments; for more student study; more informal instruction; and more use of educational films. There is also a demand for simplifying the curriculum by combining courses and preventing overlapping; for unifying and integrating duties of student nurses; for using student service primarily for instructional purposes; for personality development as an objective; and for better guidance of student study.

In interpreting this study it is well to remember that it is a judgment study involving replies of directors of 90 hospital and collegiate schools of nursing. When better evaluations of nursing and nursing education are possible, we may draw conclusions of a more valid and reliable nature. In the meantime, we must depend largely upon judgments of experienced nurses and nurse educators.

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PUBLIC HEALTH

I. C. RIGGIN, M. D.,
State Health Commissioner of Virginia.

Trend of Typhoid Fever in Virginia During the Past Three Decades.

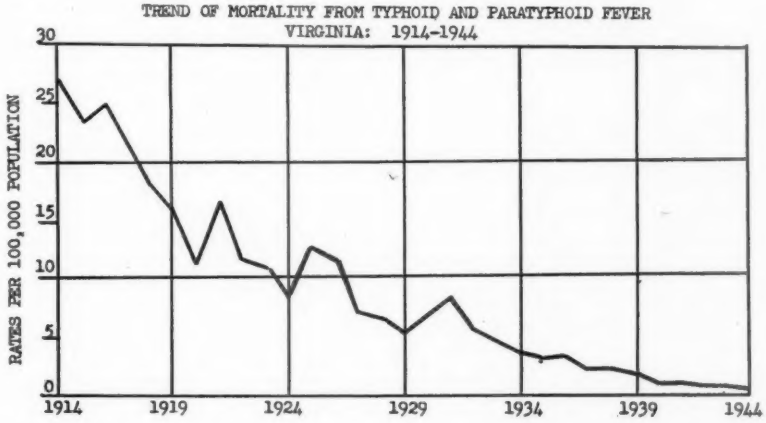
One of the most spectacular conquests over disease is that against typhoid fever. This result has been due to the ability of science to apply its attack on a mass basis through the development of safe water supplies in cities and towns and the establishment of safe sewage disposal facilities for such communities. To this overall plan must be added the marked advances that have been made, through public health activities, in inspiring the installation and proper maintenance of private water supplies and sewage disposal equipment in rural areas, and the application of immunizations. Through these measures the great typhoid fever toll formerly attributed to the private well or spring has been reduced to a minimum. Indeed, except for the sporadic case, due to negligent private environmental sanitation, the imported case and that of carrier origin, the typhoid fever problem, in the former acceptance of this term, no longer exists in Virginia.

Note the marked decline in both white and colored mortality rates during the 30-year period. Decrease in the white rate from 1914 to 1944 was 99 per cent; in colored rate, 98 per cent. Note, also, that the colored rate in 1914 was about 40 per cent higher than the white; in 1944, was slightly more than twice the white rate. There were 4,610 reported cases of typhoid fever in the State in 1914 and 127 cases in 1944.

TYPHOID FEVER MORTALITY WITH NUMBER OF CASES BY TEN-YEAR PERIODS
VIRGINIA, 1914-1944

	Deaths						Cases
	Total		White		Colored		Total
	Number	Rate	Number	Rate	Number	Rate	Number
1914	586	27.0	337	22.6	249	36.6	4,610
1924	205	8.7	123	7.3	82	12.2	1,510
1934	93	3.7	52	2.8	41	6.3	755
1944	11	0.4	6	0.3	5	0.7	127

Among the 11 deaths from typhoid fever in 1944, none occurred up to the age of 10 years; 1 death occurred in the age group 10-14 years; 2 deaths from 15 to 19 years; 5 deaths from 20 to 39 years; and 3 from 40 to 49 years.



Of the 127 cases in 1944, 8 were reported under 5 years of age; 19 cases from 5 to 9 years; 20 from 10 to 14 years; 11 from 15 to 19 years; 44 from 20 to 39 years; 13 from 40 to 59 years; 6 were over 60 years, and 6 were unknown as to age.

In other words, slightly less than three-fourths of the deaths, and a little over one-half of the cases occurred past 20 years of age.

In 1944 one death occurred during the first quarter of the year; 1 during the second quarter; 5 in the third quarter; and 4 in the last quarter.

Among cases for the same year, 17 occurred in the first quarter; 33 in the second; 48 in the third; and 29 in the fourth quarter of the year.

The graph above shows a precipitate downward trend for typhoid fever mortality in the State from 1914 to 1920. Following this period until 1932, a less rapid decline with considerable fluctuation is noted. Beginning with 1933, a consistent, downward movement maintains until 1944, when a new low record was reached.

The rural physician can supplement greatly the public health activities directed to reducing further the individual environmental hazards of those living outside communities on farms or small places, by offering advice and counsel to those with whom he comes in direct professional contact. This teamwork between the family physician and the public health officials always has been noted, but an even greater emphasis would be of value in decreasing what remains of the typhoid fever hazard.

CASE REPORT OF MATERNAL DEATH

MATERNAL HEALTH COMMITTEE,
MEDICAL SOCIETY OF VIRGINIA

This case (code no. 160-C) is that of a 36 year old colored woman, gravida 8, para 7, who was admitted to the hospital August 28, 1941. She was about 8 months pregnant and showed signs of congestive heart failure. There had been no prenatal care. During the preceding week she had been suffering with attacks of dyspnoea, which had gradually become more distressing. Examination revealed a middle age colored female drowsy and short of breath. The blood pressure was 170/130, temperature 99, pulse 120 and respiration 38. The heart was enlarged, the lower extremities oedematous, and moist rales filled the chest. Urinalysis showed 4 plus albumin with hyaline and granular casts.

She was placed in an oxygen tent and morphine gr. ¼ with atropine gr. 1/150 were given. She also received a capsule of ephedrine and nembutal which was to be repeated three times a day. Her progress under this treatment is not stated, but five days later (September 3, 1941) an attempt was made to induce labor by the insertion of a bag. This attempt was unsuccessful and medical induction was started, which consisted of Pitocin ¼ cc. every half hour for 8 doses and quinine gr. 10 every three hours for 4 doses. The patient subsequently went into labor and delivered a stillborn child (wt. 5 pounds 2 ounces) at midnight September 4, 1941.

The following morning the patient was still short of breath and 20 drops of digitalis were given and repeated a few hours later. On midnight of the first post partum day, 2 cc. of 50 per cent magnesium sulphate were given for restlessness. From that time on her progress was down hill until she died at 2:00 P. M. September 10, 1941. During this period caffeine, strychnine, morphine, atropine and glucose solution were occasionally given.

No autopsy was performed, nor is there any record of blood pressure readings after the original examination.

COMMENT

This case is considered to be a preventable death. In cases of circulatory failure the first object to be attained is cardiac compensation. Whenever possible the obstetrician should associate himself with a competent cardiologist and a combined line of treatment agreed upon. Certainly this patient should have received rest and digitalization before any attempt was made to deliver her. It would probably have been best to wait until the ninth month. Certainly the use of a bag for induction is to be condemned and the method of induction which was finally used, is questionable.

There is every reason to believe that had this patient received proper prenatal care, in combination with more conservative management after her admittance to the hospital, a very different outcome would have resulted.

WOMAN'S AUXILIARY
to the
MEDICAL SOCIETY OF VIRGINIA

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President-Elect—MRS. P. M. CHICHESTER, Abingdon
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Chairman, Press and Publicity—MRS. A. G. SHETTER, Richmond.

Auxiliary Board Meeting.

Owing to a ruling of the Office of Defense Transportation, the auxiliary will be unable to hold its annual meeting in October. However, as many matters of interest always arise for discussion, it has been decided to have a board meeting of the Auxiliary to the Medical Society of Virginia in Richmond, in October. Exact date and time will be announced later in the MONTHLY.

VIRGINIA M. PEARSON,
(MRS. PAUL C. PEARSON),
President.

Norfolk County Auxiliary.

The Woman's Auxiliary to the Norfolk County Medical Society met May 21, at 8 P. M. at the home of the President, Mrs. Southgate Leigh, Jr., following a short meeting of the Executive Committee.

As there had been no reports from the Standing Committees at the Executive Committee meeting the President asked for a motion to omit calling for these reports.

The Nominating Committee made a report, presenting the slate of officers to be voted on at the next meeting.

The President announced that since the state and national meetings would not be held this fall no delegates would be elected. The Treasurer reported, however, that we had 81 paid-up members.

The Secretary read a form letter from the Treasury Department, asking that our organization participate in the Seventh War Loan. She also reported that a letter had been received from the Director of the Port of the Hampton Roads Area asking that we observe Wartime National Foreign Trade Week, May 20-26, and especially National Maritime Day, May 22.

Mrs. Leigh read a letter from the State President, Mrs. Pearson, thanking us for our hospitality to her at our recent luncheon meeting.

The resignation of Mrs. William Lett Harris was then read. It was voted to accept her resignation with regret. Mrs. H. W. Rogers was appointed to fill the unexpired term of Mrs. Harris as Chairman of the Revisions Committee.

Next, the meeting was turned over to the Parliamentarian, Mrs. C. C. Smith, who read the recent changes in and additions to the Constitution of the Auxiliary to the Medical Society of Virginia and moved that we change our Constitution wherever advisable to conform to the revised State Constitution. This motion was carried and the President appointed Mrs. Smith and Mrs. H. W. Rogers to work on this matter.

There being no further business the meeting adjourned.

We were soon joined by the Norfolk County Medical Society and Dr. and Mrs. Leigh were hosts at a delightfully informal reception. Mrs. Southgate Leigh, Sr., received with them.

KATHERINE B. SALLEY,
(MRS. W. C. SALLEY),
Chairman, Press and Publicity.

Pro Golfers Association Helps Army Convalescents.

The Professional Golfers Association has been actively cooperating with the Army's reconditioning program. Through its regional groups it has arranged for local golf clubs to offer patients from nearby Army hospitals free instruction and playing privileges and to lend them equipment. It has provided high quality exhibition matches for convalescent patients, has built and donated golf courses at several general hospitals and provided putting greens and driving ranges at others. Eventually the PGA hopes to expand this program to all general hospitals suitably located for golfing.

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VOL. 72 JULY, 1945 No. 7

The Medical College of Virginia Issue

THE first Medical College of Virginia issue of the VIRGINIA MEDICAL MONTHLY appeared in March, 1944. This is Number 2 in a series which the College hopes the publication committee will continue indefinitely.

An effort has been made in selecting the papers to be published to have as many departments of the College as possible represented. The articles which have had to be held over will be published in future issues.

The acting editor is most appreciative of the cooperative spirit shown by every one who had a part in making this issue possible. Dr. Rucker has given him complete editing freedom and Miss Edwards' assistance throughout has been invaluable.

SIDNEY S. NEGUS.

The Baruch Center of Physical Medicine

IN the spring of 1944, Mr. Bernard M. Baruch made a gift of $250,000 to the Medical College of Virginia to be expended in ten years in establishing a center for teaching and research in physical medicine, with particular reference to hydrology, climatology, and spa therapy. Since the ultimate purpose of research and education in any branch of medicine is to improve service to the sick, the initial major responsibility of the Baruch Center of Physical Medicine was the provision of an adequate clinical program. Accordingly, the physical therapy departments of the Medical College of Virginia Hospital and St. Philip Hospital were re-designed for more efficient service and were equipped and staffed for the practice of all branches of modern physical medicine. It was assumed that once such a Center had come into being, it might serve as the outlet for advances in human knowledge emanating from its affiliated basic and clinical research laboratories. Thus the whole program of the Center has been created to stem from the fundamental needs of the sick, the handicapped and the injured.

The Center is composed of a cross-departmental staff loosely knit on the institute plan. Its members, which now number fourteen, represent three fields: the basic sciences, clinical medicine, and the technical aspects of physical and occupational therapy. No major staff member serves a single function. All participate in various

proportion to each phase of the Center's interlocked program of education, research, and service to the sick.

The administrative office, research laboratories, and shop of the Baruch Center are housed in the north wing of the fifth floor of the Clinic Building. The clinical facilities, already described, should soon permit the treatment of 40 to 50 hospitalized or ambulatory patients per day in the Medical College of Virginia Hospital and 30 to 40 at St. Philip Hospital. When alterations in the physical plant have been completed and all equipment has been installed, a parallel program may be anticipated in the white and Negro hospitals.

F. A. HELLEBRANDT,
Acting Director.

PRESIDENT'S MESSAGE

FOLLOWING up the brief notice in the last VIRGINIA MEDICAL MONTHLY with reference to our meeting in Roanoke on October 22nd and 23rd, the majority of Councilors felt that it would be preferable to have the House of Delegates represented, and with all the important developments in the medical world today, I felt very strongly that we should have as many representatives as possible present. Therefore, it was decided to have a so-called "streamlined" meeting of the House of Delegates. In order that this may be legal, we have advised each component society to elect the usual number of delegates but to send only one to the meeting. Wherever possible, the member of the Council in his particular district should represent his component society.

Several weeks ago, your Committee on Clinical and Medical Education held a meeting in Richmond. We invited Lt. Col. Staige D. Blackford, who is back on leave from the Italian theatre, to attend this meeting in order that we might have his views as a representative of the medical officers in the service. Colonel Blackford has talked to a great many of these officers with reference to this problem and he has been much interested in it. As a result of this meeting, it was decided to appoint a returned medical veteran to assist the Committee as contact man with the returning veterans. We thought that this would lend a much more sympathetic tone to the Committee and its work with these men. Dr. Andrew D. Hart, Jr., has recently received a medical discharge from the Army Medical Corps and, as he is located in Charlottesville, where the Executive Secretary has collected a large amount of material for the use of our Committee, it was thought that he might be a logical man for the position. He willingly accepted the appointment and he is being given secretarial assistance, in order that the necessary transition may be carried out. It was thought to be important that rather immediate contact be made with each member in the Armed Services, telling them about our ideas and trying to obtain theirs. Further reports, of course, will be made as the situation develops.

You have no doubt seen that the Wagner-Dingle-Murray Bill has been reintroduced into Congress, and I suggest that each one of you acquaint himself with the medical aspects of this bill. It will be analyzed for you after a sufficient time has elapsed to study this measure.

The problem of rural medical care continues to engage the activities of the members of your Committee on Public Relations and Medical Care. A recent series of public hearings showed conclusively that the rural people are considerably stirred about this problem and it demands a solution. It is to be hoped that some concrete measures may be presented to the next Legislature with reference to this matter.

H. B. MULHOLLAND,
President.

XUM

Societies

The Fauquier County Medical Society,

At a meeting on June 14th, elected the following officers for the coming year, beginning July 1st: President, Dr. V. L. McCullers, Remington; vice-presidents, Drs. H. L. Townsend, Marshall, and W. G. Trow, Warrenton; and secretary-treasurer, Dr. J. Frank Folk (re-elected), Warrenton.

At this meeting the Society also named its delegate and alternate to the House of Delegates meeting of the State Society, and Dr. M. B. Hiden of Warrenton gave an interesting talk on the Stader splints in fracture work.

Buchanan-Dickenson County Medical Society.

This Society which meets on the third Wednesday night each month, had a regular meeting on May 16th at Grundy Hospital. After supper and a business session, Capt. Joshua P. Sutherland, M.C., of Haysi, one of the members who was liberated from Bad Orb on April 2nd, gave an account of what it is to be a German prisoner of war.

Dr. J. C. Trivett of Page and Dr. T. C. Sutherland of Haysi are president and secretary, respectively.

News

Medical College of Virginia Commencement.

Commencement exercises for the 108th session of the Medical College of Virginia were held at the Mosque Theatre on June 16th at 8:00 p.m. Honorable Clarence Watson Meadows, Governor of West Virginia, gave the address of the evening. At this time, the College conferred the honorary degree of Doctor of Humane Letters upon Dr. F. W. Boatwright, president of the University of Richmond.

The graduates this year totaled 177, there being 93 in medicine; 37 in dentistry; three in pharmacy; 42 in nursing; 1 bachelor of science in nursing; and one master of science in biochemistry. Graduates in medicine with hospital appointments are:

MEDICAL COLLEGE OF VIRGINIA HOSPITAL, Richmond—Drs. Kenneth Dale Bailey, Clarksburg, W. Va.; Cecil Cooper Bell, Jr., Lynchburg; Joseph Alston Boyd, Jr., Atkinson, N. C.; Esther Clark Brown, Salem; William Mark Bruch, Bluefield, W. Va.; George Allyn Chapman, Shenandoah Caverns; Belle DeCormis Fears, Accomac; Edward Graham Field, Nuttall; Owen Gwathmey, Beulahville; George Southey Hankins, Newport News; Catherine Bird Hoover, Richmond; William Harvey Huffstetler, Jr., Haw River, N. C.; George Robert Jones, Jacksonville, Fla.; Ernest Waddill Larkin, Jr., Washington, N. C.; Unity Fern Monger, Harrisonburg; DeArmond Moore, Charlotte, N. C.; Herman Meyer Nachman, Middleburg; William Hanna Talbot, Shelbyville, Ky.; George Franklin West, Camden, S. C.; and Charlie Francis Wingo, Richmond.

STUART CIRCLE HOSPITAL, Richmond—Dr. William Edgar Copeland, Huntington, W. Va.

JOHNSTON-WILLIS HOSPITAL, Richmond — Dr. Thomas Emmett Smith, Hayes Store.

CHESAPEAKE & OHIO HOSPITAL, Clifton Forge—Dr. John Wallace Compton, Jr., Ronceverte, W. Va.

NORFOLK GENERAL HOSPITAL, Norfolk—Dr. Mac Johnson Hough, Salem.

UNIVERSITY OF VIRGINIA HOSPITAL, Charlottesville—Dr. Augustus Alexander McLean, Jr., Lenoir, N. C.

DEPAUL HOSPITAL, Norfolk—Drs. James Terrell May, Jr., and Madge Dunn May, both of Richmond.

LEWIS-GALE HOSPITAL, Roanoke—Dr. Roy Burton Sampson, Jr., Beckley, W. Va.

ELIZABETH BUXTON HOSPITAL, Newport News—Dr. Stanley Wise White, Odd.

ST. LOUIS CITY HOSPITAL, St. Louis, Mo.—Drs. John Raymond Beem, Richmond; Roberta Hall Benchea, Weston, W. Va., and Charles Robinson, Richmond.

MASSACHUSETTS MEMORIAL HOSPITALS, Boston—Dr. Edward Hatcher Alderman, Four Oaks, N. C.

PETER BENT BRIGHAM HOSPITAL, Boston—Dr. Paul Ward Robinett, Huntington, W. Va.

QUEENS GENERAL HOSPITAL, Jamaica, L. I.,

N. Y.—Dr. Baruj Benacerraf, New York, N. Y.

KINGS COUNTY HOSPITAL, Brooklyn, N. Y.—Drs. Leonard James Flohr, Huntington, W. Va., and John Milton Lukeman, Richmond.

HARLEM HOSPITAL, New York, N. Y.—Dr. Martin Freundlich, New York, N. Y.

NEW YORK CITY HOSPITAL, New York, N. Y.—Drs. John Harvey Nicholson, Statesville, N. C., and Frederick Brunell Spencer, Jr., Salisbury, N. C.

UNIVERSITY HOSPITAL, Baltimore, Md. — Dr. Reece Richard Boone, Jr., Smithers, W. Va.

FRANKLIN SQUARE HOSPITAL, Baltimore, Md.—Dr. Lois Fox Fryer, Bridgeport, W. Va.

CHARLESTON GENERAL HOSPITAL, Charleston, W. Va.—Drs. Walter Edward Bundy, Jr., Oak Hill, W. Va.; Alfred Joseph, Whitesville, W. Va.; and Elliot Moses Namay, Charleston, W. Va.

OHIO VALLEY GENERAL HOSPITAL, Wheeling, W. Va.—Drs. Paul Spiro Gotses, Fairmont, W. Va.; and William Harry Robison, Morgantown, W. Va.

ST. MARY'S HOSPITAL, Huntington, W. Va.—Dr. George Douglas Hayden, Huntington, W. Va.

CHESAPEAKE & OHIO HOSPITAL, Huntington, W. Va.—Dr. John Franklin Sinnett, Superior, W. Va.

REX HOSPITAL, Raleigh, N. C.—Drs. James Lyle Dellinger, Clifton Forge; John Talbert King, Burlington, N. C.; and Robert Hammond Sease, Richmond.

CITY HOSPITAL, Winston-Salem, N. C.—Dr. Marvin Worth Phillips, Asheboro, N. C.

BARONESS ERLANGER HOSPITAL, Chattanooga, Tenn.—Drs. Walter Scott Gilmer, Richmond; and George Andrew Zirkle, Jr., Danville.

CINCINNATI GENERAL HOSPITAL, Cincinnati, Ohio—Dr. Donald Leroy Greever, Woodville, Ohio.

STATE OF WISCONSIN GENERAL HOSPITAL, Madison, Wisc.—Drs. Grover Cleveland Honeycutt, Jr., Big Stone Gap; and Ben Thomas Painter, Williamsburg.

DOCTORS HOSPITAL, Washington, D. C.—Drs. Thomas Gray Hurdle, Roanoke; and Robert Ray Rector, Lexington.

GALLINGER MUNICIPAL HOSPITAL, Washington, D. C.—Drs. Clara Mae Iseley, Huntington, W. Va.; and Nancy King Wade, Surry.

ST. FRANCIS HOSPITAL, Pittsburgh, Pr.—Drs. Edwin Julian Kamons, Parkersburg, W. Va.; Franklin William Mallamo, Fairmont, W. Va.; and Albert James Paine, Atlanta, Ga.

PHILADELPHIA GENERAL HOSPITAL, Philadelphia, Pa.—Dr. Herbert Gaines Langford, Jr., Columbia, S. C.

PENNSYLVANIA HOSPITAL, Philadelphia, Pa.—Dr. Lockert Bemiss Mason, Richmond.

PRESBYTERIAN HOSPITAL, Philadelphia, Pa.—Dr. Robert LaRue Parsons, Belle Vernon, Pa.

SOUTHERN BAPTIST HOSPITAL, New Orleans, La.—Drs. William Graham Painter, Big Stone Gap; and Earl Edward Wilkison, Parkersburg, W. Va.

BAYAMON CHARITY DISTRICT HOSPITAL, Bayamon, P. R., and SCHOOL OF TROPICAL MEDICINE, San Juan, P. R.—Dr. Ramon Miguel Saurez, Jr., Santurce, P. R.

Others in the class who have joined one of the Services and announced no special hospital appointment are:

Dr. Frank Matthew Booth, Jr., Huntington, W. Va.
Dr. Raymond Sidney Brown, Gloucester.
Dr. Robert Luikart Chamberlain Philippi, W. Va.
Dr. George Edwin Cox, Covington.
Dr. James Hubert Davidson, Lexington.
Dr. Edward Garland Davis, Jr., Richmond.
Dr. Willard Milton Fitch, Allentown, Pa.
Dr. Thomas Walton Green, Burkeville.
Dr. Charles Henry Hagan, Jr., Huntington, W. Va.
Dr. Larry Allison High, Richmond.
Dr. Claude Kelso Kelly, Aylett.
Dr. Frederick Vivan Lilly, Montgomery, W. Va.
Dr. Mann Terrell Lowry, Beaverdam.
Dr. John James Marra, Morgantown, W. Va.
Dr. Harvey Ray St. Clair, Staunton, Va.
Dr. William Harry Shaia, Richmond.
Dr. Archie Carey Thompson, Charleston, W. Va.
Dr. Forrest Prettyman White, Norfolk.
Dr. Philip Abney Wilhite, Jr., Richmond.
Dr. Fred Eugene Wise, Jr., Marmet, W. Va.
Dr. Sydnor Terry Withers, Abingdon.
Dr. David Earl Yoho, Moundsville, W. Va.

University of Virginia Finals.

Graduation exercises for the Department of Medicine were held on June 16th. At this time they were addressed by Dr. Staige D. Blackford, a member of the faculty on army leave, who has recently returned from duty with the 8th Evacuation Hospital in Italy. As a gift to the University, the class presented a portrait of Dr. Harvey E. Jordan, Dean of Medicine.

The following are graduates with hospital appointments:

UNIVERSITY OF VIRGINIA HOSPITAL, Charlottesville—Drs. Marshall David Baxter, Washington, D. C.; Lewis Frazier Bell, Staunton; Franklin Talmadge Buchanan, Bristol; Charles Lucian Crockett, Jr., Roanoke; Don Abbot Gaddis, Arlington; John Pinckney Harloe, Charlottesville; Robert Price Irons, Elkins, W. Va.; Stephen Brooks Longley, Madison, N. J.; David Smythe McKee, Bristol; William Milholland Patterson, Pittsburgh, Pa.; George Ward Shannon, Broadway; and Donald Shotton, Suffolk.

DEPAUL HOSPITAL, Norfolk—Drs. William Dimmock Buxton, Newport News; and Dahar Cury, Jr., Norton.

MEDICAL COLLEGE OF VIRGINIA, Richmond—Dr. Lawrance Samuel Miller, Bridgewater.

U. S. NAVAL HOSPITAL, Ft. Eustis—Dr. Edwin Booth Vaden, Gretna.

PRESBYTERIAN HOSPITAL, New York, N. Y.—Dr. Miller Shannon Allen, Jr., Bland.

LONG ISLAND COLLEGE HOSPITAL, Brooklyn, N. Y.—Dr. Francis Wilbur Fitzhugh, Jr., Charlottesville.

ALBANY MEDICAL SCHOOL HOSPITAL, Albany, N. Y.—Dr. Herbert Durant Gullick, Greenville, S. C.

KING'S COUNTY HOSPITAL, Brooklyn, N. Y.—Dr. Marcel Jerome Hornowski, Jamaica, N. Y.

KING'S COUNTY HOSPITAL, Long Island, N. Y.—Dr. William Eager Kelly, Bristol.

ST. LUKE'S HOSPITAL, New York, N. Y.—Dr. Lewis George Richards, Roanoke.

NEW YORK POST-GRADUATE HOSPITAL, New York, N. Y.—Dr. Mason Romaine, III, Petersburg.

PHILADELPHIA GENERAL HOSPITAL, Philadelphia, Pa.—Dr. Melvin Gustavus Alper, Wytheville.

ST. LUKE'S HOSPITAL, Bethlehem, Pa.—Drs. Max Baumeister, Jr., Norfolk; and William Laird Sager, Danville.

PROTESTANT EPISCOPAL HOSPITAL, Philadelphia, Pa.—Drs. William Klipstein Harryman, Jr., Hackensack, N. J.; and William Dulaney Lewis, Jr., Richmond.

WESTERN PENNSYLVANIA HOSPITAL, Pittsburgh, Pa.—Dr. Milton Segal, Norfolk.

BETH ISRAEL HOSPITAL, Newark, N. J.—Drs. Herbert Murray Levitt, Petersburg; and Ralph Robbins, Miami Beach, Fla.

MEDICAL CENTER, Jersey City, N. J.—Dr. Charles Alfred Rothfuss, Williamsport, Pa.

HOSPITAL FOR WOMEN OF MARYLAND, Baltimore, Md.—Dr. Teodoro Alberto Arias, Panama City, R. P.

JOHNS HOPKINS HOSPITAL, Baltimore, Md.—Dr. Robert Stewart Boyd, Winchester.

UNION MEMORIAL HOSPITAL, Baltimore, Md.—Dr. Samuel Henley Carter, The Plains.

EMORY UNIVERSITY HOSPITAL, Emory, Ga.—Dr. William Earl Bloomer, Dearborn, Mich.

HILLMAN AND JEFFERSON HOSPITAL, Birmingham, Ala.—Drs. Wade Hampton Brannon, Anniston, Ala.; and James Austin Davis, Bessemer, Ala.

ST. LOUIS CITY HOSPITAL, St. Louis, Mo.—Drs. Lewis Smith Chase, Hartford, Conn.; and Acors William Thompson, Falls Church.

U. S. NAVAL HOSPITAL, New Orleans, La.—Dr. Crawford Hal Cleveland, Jr., Anniston, Ala.

TOURO INFIRMARY CLINIC, New Orleans, La.—Dr. Louis Sparkman Graham, Jr., Pittsburgh, Pa.; and Raeburn Carson Llewellyn, Foley, Ala.

WINSTON-SALEM CITY HOSPITAL, Winston-Salem, N. C.—Dr. Wilber Russell Ellis, Jr., Wakefield.

DUKE UNIVERSITY HOSPITAL, Durham, N. C.—Dr. Myers Hampton Hicks, Florence, S. C.

BOWMAN-GRAY HOSPITAL, Winston-Salem, N. C.—Dr. Henry Clas Newsome, Jr., Winston-Salem, N. C.

DELAWARE HOSPITAL, Wilmington, Del. — Dr. William Cary Fleming, Yorktown.

CHILDREN'S HOSPITAL, Los Angeles, Calif.—Dr. Charles Irving Fuller, Jr., Norton.

MARY HICKOCK HOSPITAL, Hanover, N. H.—Dr. Martin Edward Gallagher, Jr., Norfolk.

VANDERBILT UNIVERSITY HOSPITAL, Nashville, Tenn.—Drs. George Benjamin Garis, Nashville, Tenn.; and William Rankin Nelson, Charlottesville.

BAPTIST MEMORIAL HOSPITAL, Memphis, Tenn.—Drs. Richard Hubert Lowe, Roanoke; and Thomas Murrell Thornhill, Jr., Lynchburg.

MASSACHUSETTS GENERAL HOSPITAL, Boston, Mass.—Dr. Carl William Gottschalk, Salem.

U. S. NAVAL HOSPITAL, Pensacola, Fla.—Dr. Clifton Rhodes Gruver, Washington, D. C.

EMERGENCY HOSPITAL, Washington, D. C.—Dr. Lloyd Bratton Harrison, Jr., Washington, D. C.

GOOD SAMARITAN HOSPITAL, Portland, Ore.—Dr. Jack Lee Herrell, Manassas.

HARPER HOSPITAL, Detroit, Mich.—Dr. David Benjamin Levy, Suffolk.

ROPER HOSPITAL, Charleston, S. C.—Dr. Leo-

nidas Rosser Littleton, Jr., Arlington.

U. S. NAVAL HOSPITAL, Charleston, S. C.—Dr. Richard Deaton Nauman, Richmond.

COLORADO GENERAL HOSPITAL, Denver, Col.—Dr. Edward John Lowell, Jr., Denver, Col.

HARTFORD GENERAL HOSPITAL, Hartford, Conn.—Dr. Edward Van Zile Scott, Birmingham, Ala.

LAKESIDE HOSPITAL, Cleveland, Ohio—Dr. Frederick Victor Vance, Jr., Bristol, Tenn.

Other graduates were:

Dr. Ann Butterworth, West Hartford, Conn.

Dr. Esther Blanchard Herrell, Charlottesville.

Medical Society of Virginia.

As Dr. Mulholland, President, has stated, there will be no general meeting of the Medical Society of Virginia this year, on account of orders from the Office of Defense Transportation to restrict attendance upon meetings to not more than fifty (50) persons from out of town. For the same reason, there may be only an "abbreviated" meeting of the House of Delegates, as has been explained to each of the component societies. However, as there are only forty-eight component societies, it is hoped each one may arrange to have a representative at the meeting of the House of Delegates. This is to be in Roanoke, October 22 and 23. The Council will meet on Monday morning and the House of Delegates will hold sessions on Monday afternoon and Tuesday morning. Hotel Roanoke will be headquarters for this meeting and representatives are urged to make reservations promptly as the hotel will have only a limited number of rooms available.

Re-Appointed to State Board of Medical Examiners.

From nominations made by the House of Delegates of the Medical Society of Virginia at its last session, Governor Darden has re-appointed Dr. John W. Preston as examiner from the Sixth District, for a term of five years, effective July 1, 1945.

Appeal for Release of Medical Officers Not Needed by Armed Forces.

Release of Indiana physicians in the armed forces who are not needed to provide complete medical care for men and women of the armed services was urged in a statement made today by the executive committee of the Indiana State Medical Association, as follows:

"Now that V-E Day is passed and we are expecting the release from service of part of our armed Forces, immediate consideration should be given to the release of as many of the doctors as is consistent with the best interest of the armed forces and of the civilian population. Promptness in reducing the size of the Medical Corps should be the positive aim of everyone having responsibility in this field. There should never be a time when any doctor is being kept in the military service with nothing for him to do professionally in connection with his military status. He should not be kept in the service to do things which could as well be done by those not trained as physicians. * * *

"The Executive Committee of the Indiana State Medical Association urges that those in authority look upon the early and prompt release of physicians, when they can be spared, as a matter of the utmost urgency and importance—and when we say 'when they can be spared', we must be understood to mean that every soldier, sailor, marine, nurse, WAC, WAVE, or SPAR, or anyone else who needs medical care in connection with military services will have it, even without the physicians who are to be dismissed. But after all the armed services are taken care of, any delay in releasing a physician should be avoided as an injustice to the public, an unnecessary burden on the treasury, a source of criticism of those in authority, and unfair treatment of the physician who is serving his country."

New President of Southern Medical Association.

Dr. E. Vernon Mastin of St. Louis, Missouri, elected vice-president of the Southern Medical Association at its last annual meeting, became president of the Association upon the recent death of Dr. Ballenger.

News from the University of Virginia, Department of Medicine.

The Board of Directors of the John and Mary R. Markle Foundation has made an additional grant of $2,400 to Dr. Ralph B. Houlihan in support of his study of agglutinative action of streptococcus viridans on blood platelets.

The Director of the Office of Scientific Research and Development has extended the duration of Dr. D. C. Smith's contract in support of his research on Penicillin in the Treatment of Syphilis for a period of six months with an allocation of funds in the amount of $2,150.00.

XUM

Graduation exercises for the fourth year class were held in Cabell Hall on Saturday, June 16th, at 11:30 A. M. The degree of Doctor of Medicine was conferred on 65 graduates. Of these, 45 students received commissions in the Army and 17 in the Navy. Lt. Colonel Staige Davis Blackford, recently with the Eighth Evacuation Hospital in Italy, gave the graduation address.

Dr. Fletcher D. Woodward attended the meeting of the American Board of Otolaryngology in New York. He, also, attended the meeting of the American Academy of Otolaryngology and Ophthalmology Committee on the Conservation of Hearing.

Married.

Captain Richard Phillips Bell, M.C., AUS., class of '38, University of Virginia Medical School, and Lieutenant Hilda Steele Franklin, ANC., of Fieldale, May 26th. They are stationed in Italy with the 8th Evacuation Hospital. Captain Bell is the son of Dr. and Mrs. R. P. Bell of Staunton.

Dr. Franklin William Mallamo, Fairmont, W. Va., and Miss Dorothy Marie Bowler of Richmond, June 18. Dr. Mallamo is a member of the class of '45, Medical College of Virginia, and will intern at St. Francis Hospital, Pittsburgh.

Dr. L. R. Broome,

Connected with the staff of Catawba Sanatorium for seventeen years, for six of which he was physician-in-chief, has located in Danville as assistant to City Health Officer, Dr. R. W. Garnett. Being a specialist in tuberculosis, he will devote half of his time to Hilltop Sanitarium, where he will be the chief medical officer. Dr. Broome plans to push diagnostic clinics for the early discovery of tuberculosis and hopes the city authorities may install a complete X-ray outfit at the Health Department for chest examinations. In addition to the above, he will also do private consultation work in tuberculosis.

Dr. E. Lynwood Bagby,

After practicing in Richmond for several years, has moved to Richlands where he is connected with the surgical department of the Clinch Valley Clinic Hospital.

Dr. Mason Romaine

Has returned to his home in Petersburg, after completing a graduate course in medicine at Johns Hopkins University in Baltimore.

News of Doctors In Service.

Promotions have recently been noted for the following Virginia doctors in Service:

To *Lieutenant Commander:*

Dr. Wellford C. Reed, Richmond.

To *Colonel:*

Dr. Guy Winston Horsley, Richmond.

To *Lieutenant Colonel:*

Dr. Arthur Morton Smith, Jr., Charlottesville.

To *Major:*

Dr. Harry Brick, Richmond.

Dr. Edwin McRae Rucker, Richmond.

To *Captain:*

Dr. Fleming Wood Gill, Richmond.

Lt. Colonel Harry J. Warthen, Jr., of Richmond, is at the present time Chief of Surgical Service at the AAF Regional and Convalescent Hospital, Camp Davis, N. C. He is also AAF Surgical Consultant to the Northeastern District, U. S. A. This entails visiting the Surgical Services of the AAF Hospitals in the 17 States included in the Northeastern District, which extends from Maine to Alabama. Each District Consultant also serves as a member of the Surgical Advisory Board to the Air Surgeon.

Dr. Saunders on Westbrook Staff.

Dr. John Rudolph Saunders, who recently resigned as superintendent at the State Hospital at Morganton, N. C., has become a member of the medical staff of Westbrook Sanatorium in Richmond. He is a native of North Carolina and a graduate in medicine from the School of Medicine of Emory University in 1926.

Richmond Tuberculosis Association.

At the annual meeting of this association on May 29, Dr. Emily Gardner was elected president, succeeding Dr. T. Dewey Davis who has served in this capacity for two years. Dr. Gardner is the first woman to hold this office since the organization of the association in 1916. Miss Nora Spencer Hamner is executive secretary.

Schenley Laboratories, Inc.,

Is presenting a series of 13 broadcasts over the Columbia Broadcasting System which began Tues-

day, June 5th. The series, entitled "The Doctor Fights", features leading Hollywood dramatic motion picture stars in half hour dramatizations of the actual feats accomplished by medical officers of the armed forces during World War II. It is planned, wherever possible, to cut in from Washington and other points, the surgeons and physicians whose stories are being dramatized.

The program series is being broadcast from Hollywood at 9:30 p.m., e.w.t., over CBS, on Tuesday.

Medico-Legal Conference and Seminar.

The Department of Legal Medicine of the medical schools of Harvard, Tufts, and Boston University in association with the Massachusetts Medico-Legal Society will present a six-day program of lectures, conferences, and demonstrations, October 1-6, in Boston, having to do with the investigation of deaths in the interests of public safety. Attendance during five of the six days of the course will be limited to fifteen persons who have registered in advance. On one day (October 3) the program will be open to any physician, lawyer, police official, or senior medical student who may care to attend.

Further information may be obtained from the secretary of the Massachusetts Medico-Legal Society, 25 Shattuck Street, Boston.

For Sale.

General Electric, Model R-38, 39, Diagnostic X-Ray Unit, combination Radiographic and Fluoroscopic, with standard Bucky diaphragm 200/260 v; 60 cy. Also holder for chest work. Used by private practitioner only one year previous to entering military service. All accessories available. Excellent condition, put away by G. E. agent. Cash sale only. Address Mrs. J. W. Sinclair, Warrenton, Virginia. Telephone Warrenton 168. (*Adv.*)

Wanted—

Salesmen to call on physicians and hospitals for collection concern. Full time or side line. Write stating territory you cover. National Discount and Audit Company, 230 West 41st Street, New York 18, N. Y. (*Adv.*)

Wanted—

One qualified to act as Superintendent of Hospital and Nurses Training School at the Petersburg Hospital. Please send application, including qualifications, to Mr. J. Gordon Bohannon, Petersburg, Virginia. (*Adv.*)

Obituaries

Dr. Beverley Randolph Tucker,

Internationally known neuropsychiatrist, died June 19 after a short illness. He was seventy-one years of age and graduated from the Medical College of Virginia in 1905. After several years of study in neuropsychiatry in this country and Europe, he returned to Richmond where he engaged in private practice. In 1908 he established the outpatient clinic in nervous diseases at the Medical College of Virginia. Dr. Tucker was appointed professor of neurology and psychiatry at the College in 1912, filling a newly created chair. In the same year he opened a small private sanatorium which has been enlarged several times and is now known as the Tucker Hospital. Dr. Tucker had many and varied professional connections. He was the first Richmond Juvenile Court physician, one of the founders of the Children's Memorial Clinic, served as a member of the State Board of Health, was chairman of the first Governor's Mental Advisory Board at the State Penitentiary, was a member of the board of the Industrial Home for Girls, and Consulting physician to the State Colony for Feebleminded and Epileptics.

Dr. Tucker was the author of several books and plays, both professional and non-professional, but considered his work in the study of pellagra as among the most important. He was one of the first to report epidemic encephalitis in this country, and in 1919 he introduced a special autogenous spinal treatment for the disease in its acute form. He was also one of the early physicians to advance the idea that conduct disturbance was a medical problem. He was also a co-editor of the former *Old Dominion Journal of Medicine and Surgery.*

Dr. Tucker had always taken an active interest in the work of the Medical Society of Virginia, having joined in 1907. He served on the Publication Committee for a number of years, and also on the Committee of the Society which compiled the History of Medicine in Virginia in the 17th, 18th and 19th centuries.

His wife and four children survive him. One son is Captain Weir Mitchell Tucker, member of the Army Medical Corps.

XUM

Dr. James Alexander Waddell,

For a number of years professor of pharmacology, materia medica and toxicology at the University of Virginia Medical School, died on June 8, at his home in Charlottesville. He was a native of Albemarle County and sixty-seven years of age. He graduated in medicine from the University of Virginia in 1911. His service at the University was started as an instructor in anatomy and he became a full professor in 1917. Dr. Waddell was a member of several special societies relating to his work as well as his local and State medical societies. His wife and two daughters survive him.

Dr. Frederick William Shaw,

Richmond, since 1924 connected with the department of bacteriology and recently parasitology at the Medical College of Virginia, died May 29. Though in ill health for some time, he had continued his research work until the day before his death. Dr. Shaw was born at Halifax, England, sixty-two years ago, but came to this country in childhood, and graduated in medicine from the University of Kansas in 1906. Shortly thereafter, he entered the government service and was stationed for sometime in the Philippines. During World War I, he served as a major in the medical corps. After this, he was connected with the University of Missouri until he came to Richmond, and here he was a member of both his local and State medical societies. His wife and a daughter survive him.

The Richmond Academy of Medicine, in resolutions on Dr. Shaw, states: "In the years that we have known him we learned to regard him as a man of exceptional knowledge, which, in his kindly way he was always willing to give to those who sought his help. He was ever loyal to his friends, to his students and to his colleagues."

Dr. George Craig Eggleston,

Prominent physician of Amelia, died June 14th after a brief illness. He was seventy-four years of age and a graduate of the Medical College of Virginia in 1893. Dr. Eggleston had been a member of the Medical Society of Virginia for twenty-eight years. His wife, three sisters and three brothers survive him.

Dr. Thomas Latane Driscoll,

President of the James River Medical Society, died May 30th, at his home, "Folly Farm", in Cumberland County. He was sixty years of age and a graduate in medicine from the University of the South, Sewanee, Tenn., in 1906. He served with the Medical Corps of the Army during World War I, and again for a time during World War II. After World War I, he located in Richmond for practice and was connected with the department of syphilology and dermatology of the Medical College of Virginia. About seven years ago he went to his home in Cumberland County. Here he was engaged in general practice and was attending physician at the Cumberland prisoner of war camp. His wife and a daughter survive him.

Dr. Harvey Green Johnston,

Pearisburg, died March 21st, at the age of 66. He was a graduate of the former University College of Medicine, Richmond, in 1899, and served as county medical examiner for the Selective Service during World Wars I and II.

Dr. Edgar G. Ballenger,

Atlanta, Ga., president of the Southern Medical Association, died suddenly, June 1, as the result of a fall believed due to dizziness. He was a native of North Carolina and sixty-seven years of age. His medical degree was obtained from the University of Maryland in 1901. After a few years in that State, he moved to Atlanta and became one of the first urologists there. Dr. Ballenger saw service in World War I, being discharged with the rank of major, and was prominent in the medical profession. A son survives him.

Resolutions on Dr. S. E. Hughes.

WHEREAS it has pleased Almighty God to remove from our midst Dr. S. E. Hughes, one of our senior fellows and for many years an outstanding physician of our city and community, BE IT RESOLVED:

First: The community has lost a valuable and greatly beloved citizen as well as a good friend and able doctor.

Second: The medical profession regrets his passing and will miss his willing and able consultations and his genial spirit.

Third: That a copy of these resolutions be sent to Dr. Hughes's family, to the VIRGINIA MEDICAL MONTHLY, and spread on the Minutes of our Academy of Medicine.

H. A. WISEMAN, JR.,
E. HOWE MILLER,
C. W. PRITCHETT.